Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssptansc1625

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS 1		Web Page for STN Seminar Schedule - N. America
NEWS 2	MAR 15	WPIDS/WPIX enhanced with new FRAGHITSTR display format
NEWS 3	MAR 16	CASREACT coverage extended
NEWS 4	MAR 20	MARPAT now updated daily
NEWS 5	MAR 22	LWPI reloaded
NEWS 6	MAR 30	RDISCLOSURE reloaded with enhancements
NEWS 7	APR 02	JICST-EPLUS removed from database clusters and STN
NEWS 8	APR 30	GENBANK reloaded and enhanced with Genome Project ID field
NEWS 9	APR 30	CHEMCATS enhanced with 1.2 million new records
NEWS 10	APR 30	CA/CAplus enhanced with 1870-1889 U.S. patent records
NEWS 11	APR 30	INPADOC replaced by INPADOCDB on STN
NEWS 12	MAY 01	New CAS web site launched
NEWS 13	MAY 08	CA/CAplus Indian patent publication number format defined
NEWS 14	MAY 14	RDISCLOSURE on STN Easy enhanced with new search and display fields
NEWS 15	MAY 21	BIOSIS reloaded and enhanced with archival data
NEWS 16	MAY 21	TOXCENTER enhanced with BIOSIS reload
NEWS 17	MAY 21	CA/CAplus enhanced with additional kind codes for German patents
NEWS 18	MAY 22	CA/CAplus enhanced with IPC reclassification in Japanese patents
NEWS 19	JUN 27	CA/CAplus enhanced with pre-1967 CAS Registry Numbers
NEWS 20	JUN 29	STN Viewer now available
NEWS 21	JUN 29	STN Express, Version 8.2, now available
NEWS 22	JUL 02	LEMBASE coverage updated
NEWS 23	JUL 02	LMEDLINE coverage updated
NEWS 24	JUL 02	SCISEARCH enhanced with complete author names
NEWS 25	JUL 02	CHEMCATS accession numbers revised
NEWS 26	JUL 02	CA/CAplus enhanced with utility model patents from China

NEWS EXPRESS 29 JUNE 2007: CURRENT WINDOWS VERSION IS V8.2;
CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 05 JULY 2007.

NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS LOGIN	Welcome Banner and News Items
NEWS IPC8	For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

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* * * * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 09:45:20 ON 12 JUL 2007

=> FIL REG

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 09:45:44 ON 12 JUL 2007
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 11 JUL 2007 HIGHEST RN 942193-36-4
DICTIONARY FILE UPDATES: 11 JUL 2007 HIGHEST RN 942193-36-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

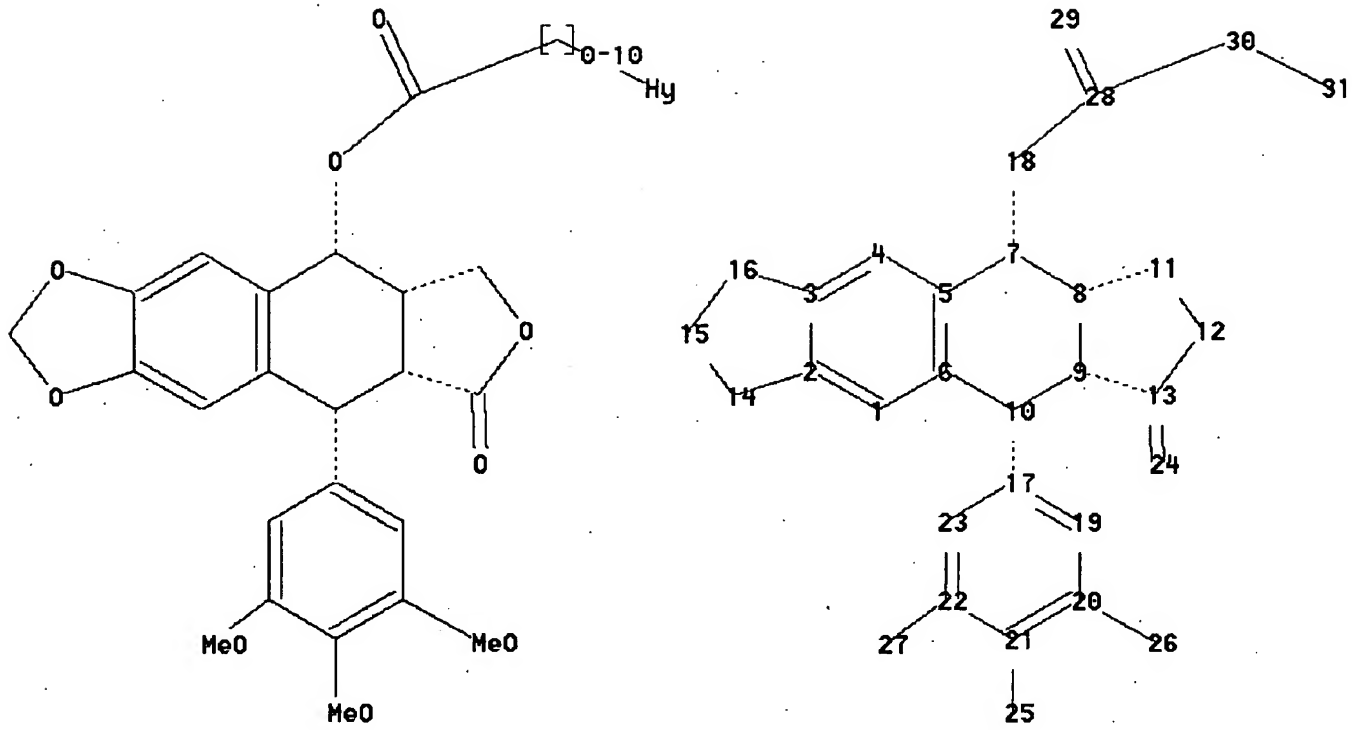
TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>
Uploading C:\Program Files\Stnexp\Queries\10612240.str



chain nodes :
18 24 25 26 27 28 29 30 31
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 19 20 21 22 23
chain bonds :
7-18 10-17 13-24 18-28 20-26 21-25 22-27 28-29 28-30 30-31
ring bonds :
1-2 1-6 2-3 2-14 3-4 3-16 4-5 5-6 5-7 6-10 7-8 8-9 8-11 9-10 9-13
11-12 12-13 14-15 15-16 17-19 17-23 19-20 20-21 21-22 22-23
exact/norm bonds :
2-14 3-16 5-7 6-10 7-8 7-18 8-9 8-11 9-10 9-13 10-17 11-12 12-13 13-24
14-15 15-16 18-28 28-29 30-31
exact bonds :
20-26 21-25 22-27 28-30
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 17-19 17-23 19-20 20-21 21-22 22-23

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:CLASS 19:Atom
20:Atom 21:Atom 22:Atom 23:Atom 24:CLASS 25:CLASS 26:CLASS 27:CLASS
28:CLASS 29:CLASS 30:CLASS 31:Atom

L1 STRUCTURE UPLOADED

=> D L1
L1 HAS NO ANSWERS
L1 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

=> S L1 SSS SAM
SAMPLE SEARCH INITIATED 09:46:22 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 51 TO ITERATE

100.0% PROCESSED 51 ITERATIONS 6 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 592 TO 1448
PROJECTED ANSWERS: 6 TO 266

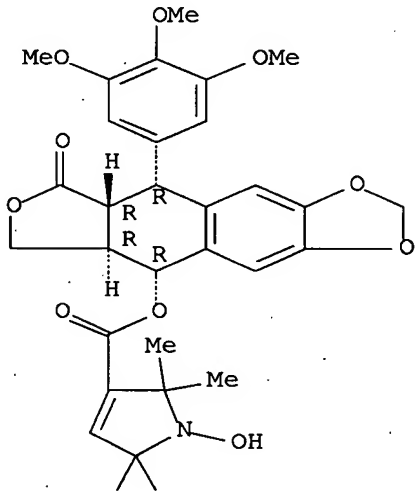
L2 6 SEA SSS SAM L1

=> D SCAN

L2 6 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 1H-Pyrrole-3-carboxylic acid, 2,5-dihydro-1-hydroxy-2,2,5,5-tetramethyl-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI)
MF C31 H35 N O10

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

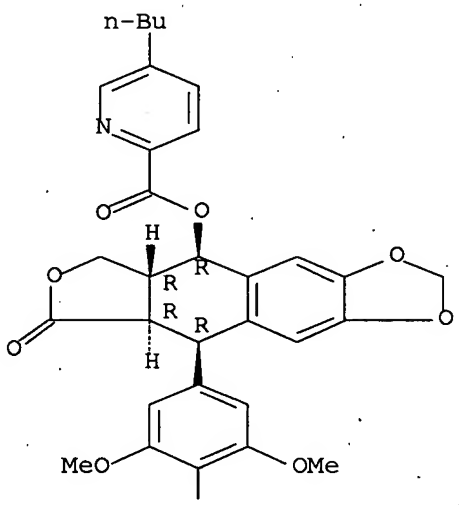
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L2 6 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 2-Pyridinecarboxylic acid, 5-butyl-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI)
MF C32 H33 N O9

Absolute stereochemistry.

PAGE 1-A



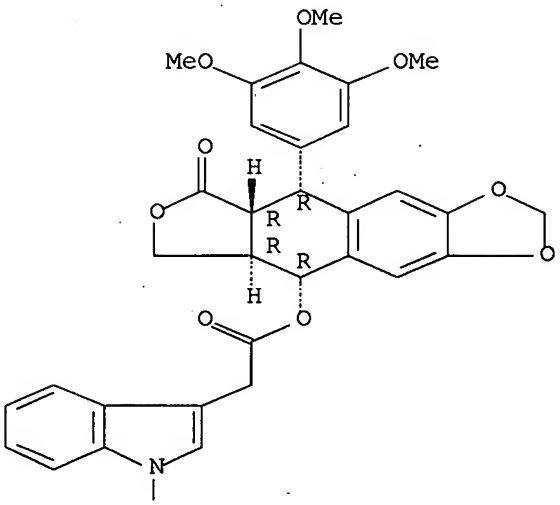
PAGE 2-A

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 6 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 1H-Indole-3-acetic acid, 1-methyl-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI)
MF C33 H31 N O9

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> FIL CAPLUS

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.90	1.11

FILE 'CAPLUS' ENTERED AT 09:47:09 ON 12 JUL 2007
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FILE COVERS 1907 - 12 Jul 2007 VOL 147 ISS 3
FILE LAST UPDATED: 11 Jul 2007 (20070711/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply.

They are available for your review at:

http://www.cas.org/infopolicy.html

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=> E US2003-612240/APPS
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E2            5     US2003-612237/AP
E3            1 --> US2003-612240/AP
E4            1     US2003-612240/PRN
E5            3     US2003-612241/AP
E6            3     US2003-612241/PRN
E7            1     US2003-612242/AP
E8            1     US2003-612243/AP
E9            1     US2003-612243/PRN
E10           5     US2003-612244/AP
E11           1     US2003-612252/AP
E12           1     US2003-612252/PRN

=> S E3
L3            1 US2003-612240/AP

=> SEL RN L3
E1 THROUGH E52 ASSIGNED

=> FIL REG
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                   ENTRY    SESSION
FULL ESTIMATED COST                                3.03       4.14

FILE 'REGISTRY' ENTERED AT 09:48:20 ON 12 JUL 2007
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STRUCTURE FILE UPDATES:   11 JUL 2007  HIGHEST RN 942193-36-4
DICTIONARY FILE UPDATES:  11 JUL 2007  HIGHEST RN 942193-36-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> S E1-E52
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              1 132-60-5/BI
                (132-60-5/RN)
              1 151838-62-9/BI
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(305-03-3/RN)
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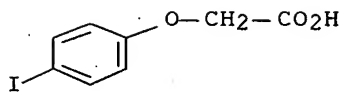
L4 52 (108-30-5/BI OR 132-60-5/BI OR 151838-62-9/BI OR 15761-39-4/BI OR 171047-77-1/BI OR 176446-74-5/BI OR 1877-75-4/BI OR 1878-91-7/BI OR 1878-94-0/BI OR 22042-71-3/BI OR 28547-08-2/BI OR 305-03-3/BI OR 401478-57-7/BI OR 405-79-8/BI OR 47789-93-5/BI OR 4940-39-0/BI OR 499-81-0/BI OR 50996-73-1/BI OR 518-28-5/BI OR 588-32-9/BI OR 61736-34-3/BI OR 618-88-2/BI OR 645-12-5/BI OR 6470-87-7/BI OR 6559-91-7/BI OR 819805-29-3/BI OR 819805-30-6/BI OR 819805-31-7/BI OR 819805-32-8/BI OR 819805-33-9/BI OR 819805-34-0/BI OR 819805-35-1/BI OR 819805-36-2/BI OR 819805-37-3/BI OR 819805-38-4/BI OR 819805-39-5/BI OR 819805-40-8/BI OR 819805-41-9/BI OR 819805-42-0/BI OR 819805-43-1/BI OR 819805-44-2/BI OR 819805-45-3/BI OR 819805-46-4/BI OR 819805-47-5/BI OR 819805-48-6/BI OR 819805-49-7/BI OR 819805-50-0/BI OR 819805-51-1/BI OR 819805-52-2/BI OR 94-74-6/BI OR 94-75-7/BI OR 94133-41-2/BI)

=> D SCAN L4

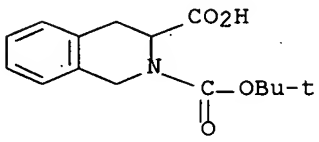
L4 52 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN Acetic acid, 2-(4-iodophenoxy)-
MF C8 H7 I O3
CI COM



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):4

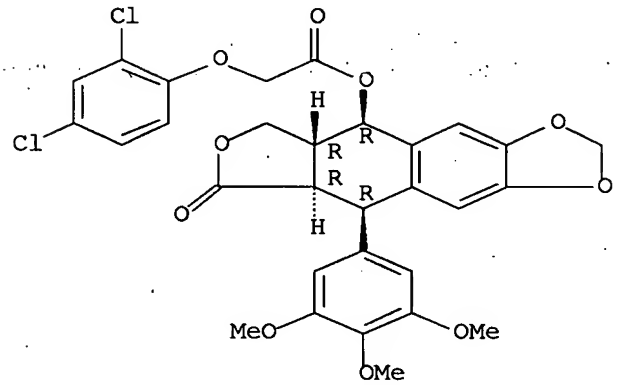
L4 52 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 2,3(1H)-Isoquinolinedicarboxylic acid, 3,4-dihydro-, 2-(1,1-dimethylethyl) ester
MF C15 H19 N O4



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L4 52 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN Acetic acid, (2,4-dichlorophenoxy)-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI)
MF C30 H26 Cl2 O10

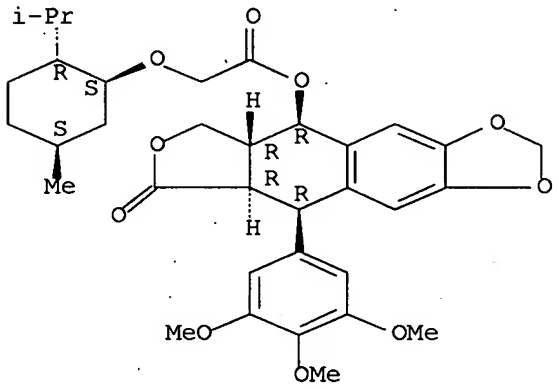
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

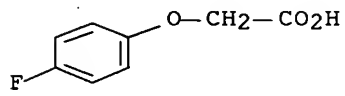
L4 52 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN Acetic acid, [[(1S,2R,5S)-5-methyl-2-(1-methylethyl)cyclohexyl]oxy]-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI)
MF C34 H42 O10

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L4 52 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN Acetic acid, 2-(4-fluorophenoxy)-
MF C8 H7 F O3
CI COM



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> S L1 SSS FULL
FULL SEARCH INITIATED 09:51:16 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 1169 TO ITERATE

100.0% PROCESSED 1169 ITERATIONS 87 ANSWERS
SEARCH TIME: 00.00.01

L5 87 SEA SSS FUL L1

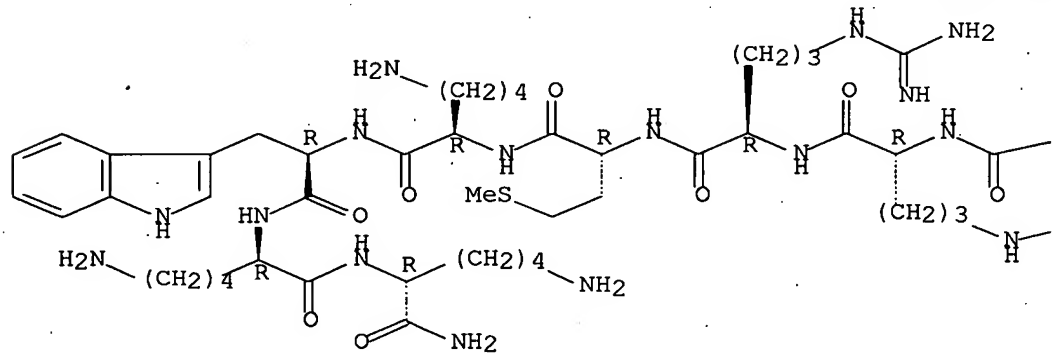
=> D SCAN

L5 87 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN D-Lysinamide, S-[1-[3-[[(5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]oxy]-3-oxopropyl]-2,5-dioxo-3-pyrrolidinyl]-L-cysteinyl-β-alanyl-D-arginyl-D-arginyl-D-methionyl-D-lysyl-D-tryptophyl-D-lysyl- (9CI)
SQL 9
MF C81 H119 N21 O20 S2

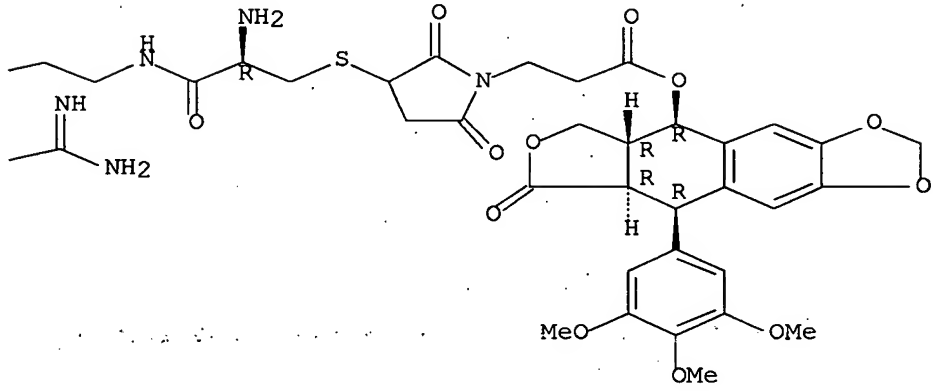
RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



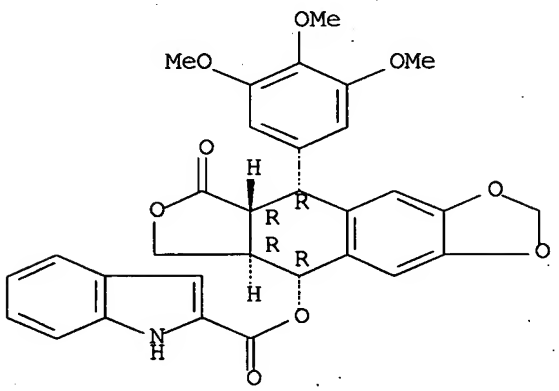
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L5 87 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 1H-Indole-2-carboxylic acid, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-

9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI)
MF C31 H27 N O9

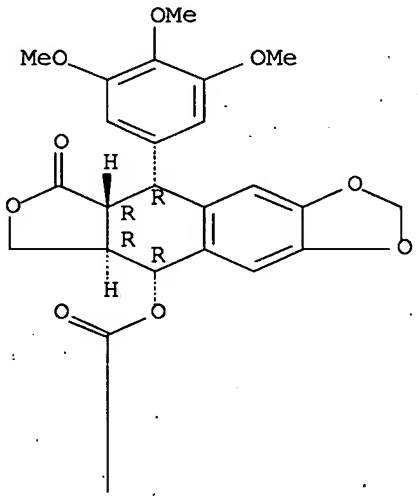
Absolute stereochemistry.

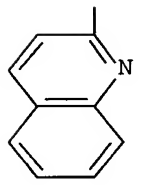


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 87 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 2-Quinolinecarboxylic acid, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI)
MF C32 H27 N O9

Absolute stereochemistry.

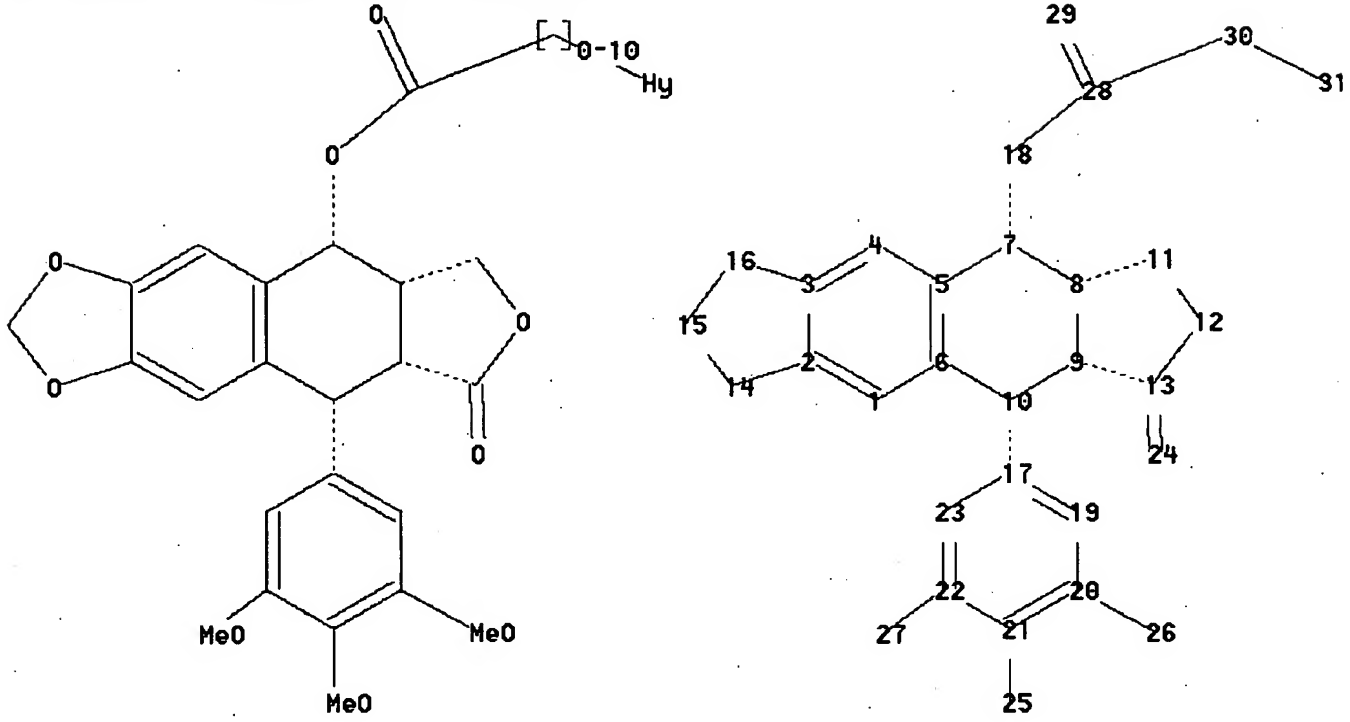




PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=>
Uploading C:\Program Files\Stnexp\Queries\10612240A.str



chain nodes :
18 24 25 26 27 28 29 30 31
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 19 20 21 22 23
chain bonds :
7-18 10-17 13-24 18-28 20-26 21-25 22-27 28-29 28-30 30-31
ring bonds :
1-2 1-6 2-3 2-14 3-4 3-16 4-5 5-6 5-7 6-10 7-8 8-9 8-11 9-10 9-13
11-12 12-13 14-15 15-16 17-19 17-23 19-20 20-21 21-22 22-23
exact/norm bonds :
2-14 3-16 5-7 6-10 7-8 7-18 8-9 8-11 9-10 9-13 10-17 11-12 12-13 13-24
14-15 15-16 18-28 28-29 30-31
exact bonds :
20-26 21-25 22-27 28-30
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 17-19 17-23 19-20 20-21 21-22 22-23

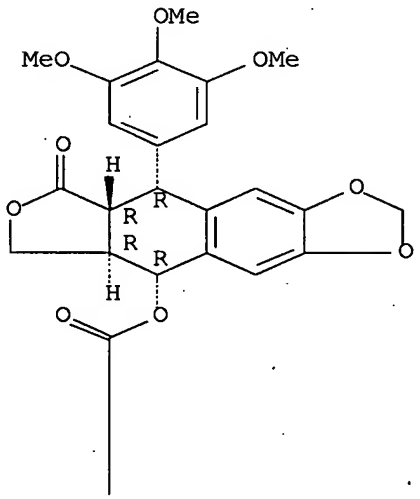
```
Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:Atom  8:Atom  9:Atom  10:Atom
11:Atom  12:Atom  13:Atom  14:Atom  15:Atom  16:Atom  17:Atom  18:CLASS  19:Atom
20:Atom  21:Atom  22:Atom  23:Atom  24:CLASS  25:CLASS  26:CLASS  27:CLASS
28:CLASS  29:CLASS  30:CLASS  31:Atom
Element Count :
Node 31: Unlimited
    N,N1-3



L6      STRUCTURE UPLOADED

=> D L6
L6 HAS NO ANSWERS
L6              STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY -  AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.


=> D HIS

     (FILE 'HOME' ENTERED AT 09:45:20 ON 12 JUL 2007)

     FILE 'REGISTRY' ENTERED AT 09:45:44 ON 12 JUL 2007
L1              STRUCTURE UPLOADED
L2            6 S L1 SSS SAM

     FILE 'CAPLUS' ENTERED AT 09:47:09 ON 12 JUL 2007
                E US2003-612240/APPS
L3            1 S E3
                SEL RN L3

     FILE 'REGISTRY' ENTERED AT 09:48:20 ON 12 JUL 2007
L4           52 S E1-E52
L5           87 S L1 SSS FULL
L6              STRUCTURE UPLOADED

=> S L6 SUBSET=5 FULL
5 IS NOT A VALID L#
L-numbers must be in the range L1-L999.
ENTER SUBSET L# OR (END):END
SEARCH ENDED BY USER

=> S L6 SUBSET=L5 FULL
FULL SUBSET SEARCH INITIATED 09:57:55 FILE 'REGISTRY'
FULL SUBSET SCREEN SEARCH COMPLETED -       87 TO ITERATE

100.0% PROCESSED       87 ITERATIONS                                80 ANSWERS
SEARCH TIME: 00.00.01

L7           80 SEA SUB=L5 SSS FUL L6

=> D SCAN L7 3
```

'3' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'

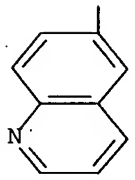
L7 80 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 6-Quinolinecarboxylic acid, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI)
MF C32 H27 N O9

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

The following are valid formats:

Substance information can be displayed by requesting individual fields or predefined formats. The predefined substance formats are: (RN = CAS Registry Number)

REG - RN
SAM - Index Name, MF, and structure - no RN
FIDE - All substance data, except sequence data
IDE - FIDE, but only 50 names

SQIDE - IDE, plus sequence data
SQIDE3 - Same as SQIDE, but 3-letter amino acid codes are used
SQD   - Protein sequence data, includes RN
SQD3   - Same as SQD, but 3-letter amino acid codes are used
SQN   - Protein sequence name information, includes RN

CALC   - Table of calculated properties
EPROP - Table of experimental properties
PROP   - EPROP and CALC

Any CA File format may be combined with any substance format to obtain CA references citing the substance. The substance formats must be cited first. The CA File predefined formats are:

ABS -- Abstract
APPS -- Application and Priority Information
BIB -- CA Accession Number, plus Bibliographic Data
CAN -- CA Accession Number
CBIB -- CA Accession Number, plus Bibliographic Data (compressed)
IND -- Index Data
IPC -- International Patent Classification
PATS -- PI, SO
STD -- BIB, IPC, and NCL

IABS -- ABS, indented, with text labels
IBIB -- BIB, indented, with text labels
ISTD -- STD format, indented

OBIB -------- AN, plus Bibliographic Data (original)
OIBIB ------- OBIB, indented with text labels

SBIB -------- BIB, no citations
SIBIB ------- IBIB, no citations

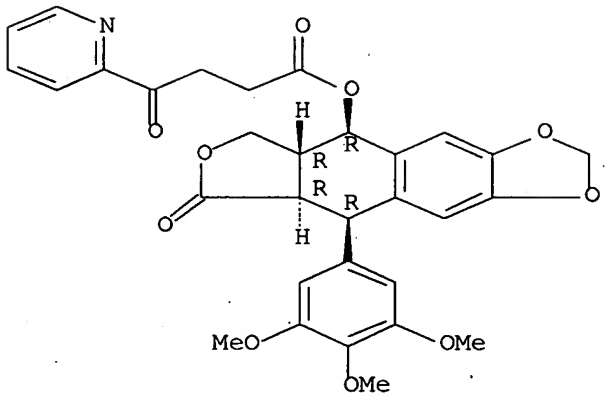
The ALL format gives FIDE BIB ABS IND RE, plus sequence data when it is available.
The MAX format is the same as ALL.
The IALL format is the same as ALL with BIB ABS and IND indented, with text labels.

For additional information, please consult the following help messages:

HELP DFIELDS -- To see a complete list of individual display fields.
HELP FORMATS -- To see detailed descriptions of the predefined formats.
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L7 80 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 2-Pyridinebutanoic acid, γ-oxo-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI)
MF C31 H29 N O10

Absolute stereochemistry.



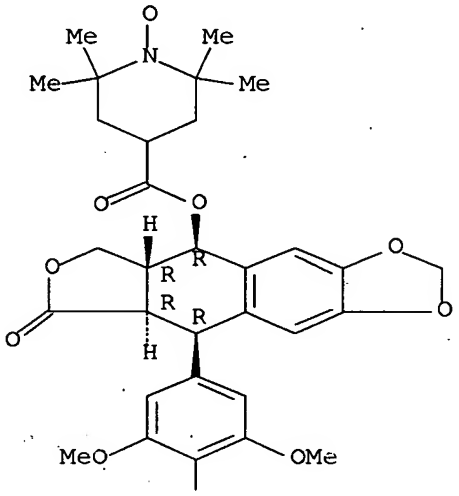
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L7 80 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 1-Piperidinyloxy, 4-[[[(5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]oxy]carbonyl]-2,2,6,6-tetramethyl- (9CI)
MF C32 H38 N O10

Absolute stereochemistry. Rotation (-).

PAGE 1-A



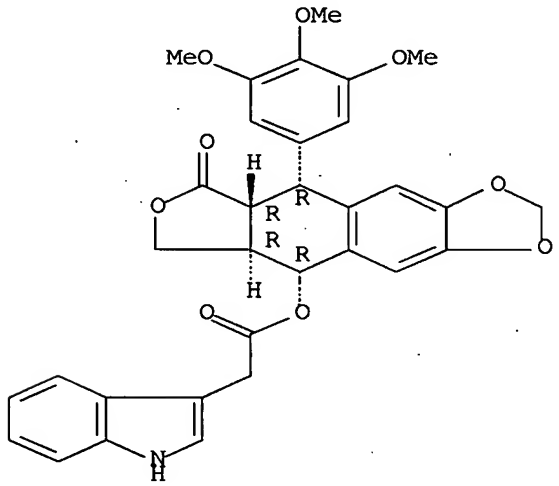
PAGE 2-A

OMe

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 80 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 1H-Indole-3-acetic acid, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI)
MF C32 H29 N O9

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> D HIS

(FILE 'HOME' ENTERED AT 09:45:20 ON 12 JUL 2007)

FILE 'REGISTRY' ENTERED AT 09:45:44 ON 12 JUL 2007
L1 STRUCTURE UPLOADED
L2 6 S L1 SSS SAM

FILE 'CAPLUS' ENTERED AT 09:47:09 ON 12 JUL 2007
E US2003-612240/APPS
L3 1 S E3
SEL RN L3

FILE 'REGISTRY' ENTERED AT 09:48:20 ON 12 JUL 2007
L4 52 S E1-E52
L5 87 S L1 SSS FULL
L6 STRUCTURE UPLOADED
L7 80 S L6 FULL SUB=L5

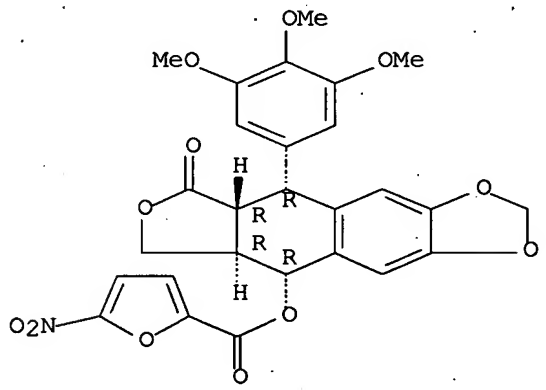
=> S L4 AND L5

L8 8 L4 AND L5

=> D SCAN 8
'8' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'

L8 8 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 2-Furancarboxylic acid, 5-nitro-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI)
MF C27 H23 N O12

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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Substance information can be displayed by requesting individual fields or predefined formats. The predefined substance formats are: (RN = CAS Registry Number)

REG - RN
SAM - Index Name, MF, and structure - no RN
FIDE - All substance data, except sequence data
IDE - FIDE, but only 50 names
SQIDE - IDE, plus sequence data
SQIDE3 - Same as SQIDE, but 3-letter amino acid codes are used
SQD - Protein sequence data, includes RN
SQD3 - Same as SQD, but 3-letter amino acid codes are used
SQN - Protein sequence name information, includes RN

CALC - Table of calculated properties
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PROP - EPROP and CALC

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APPS -- Application and Priority Information

BIB -- CA Accession Number, plus Bibliographic Data
CAN -- CA Accession Number
CBIB -- CA Accession Number, plus Bibliographic Data (compressed)
IND -- Index Data
IPC -- International Patent Classification
PATS -- PI, SO
STD -- BIB, IPC, and NCL

IABS -- ABS, indented, with text labels
IBIB -- BIB, indented, with text labels
ISTD -- STD format, indented

OBIB -------- AN, plus Bibliographic Data (original)
OIBIB ------- OBIB, indented with text labels

SBIB -------- BIB, no citations
SIBIB ------- IBIB, no citations

The ALL format gives FIDE BIB ABS IND RE, plus sequence data when it is available.
The MAX format is the same as ALL.
The IALL format is the same as ALL with BIB ABS and IND indented, with text labels.

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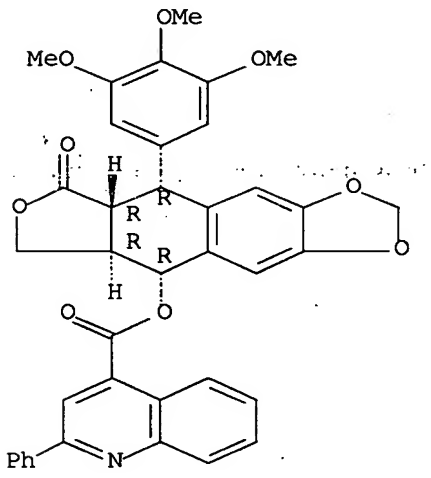
HELP DFIELDS -- To see a complete list of individual display fields.
HELP FORMATS -- To see detailed descriptions of the predefined formats.
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):8

L8 8 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 4-Quinolinecarboxylic acid, 2-phenyl-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI)
MF C38 H31 N O9

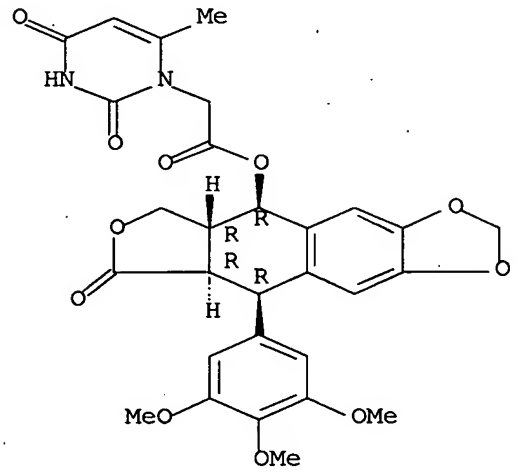
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L8 8 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 1(2H)-Pyrimidineacetic acid, 3,4-dihydro-6-methyl-2,4-dioxo-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI)
MF C29 H28 N2 O11

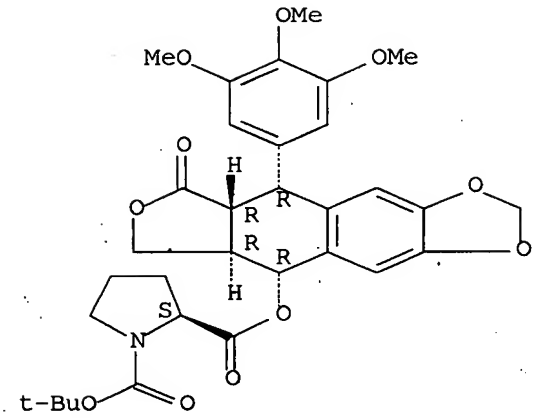
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L8 8 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 1,2-Pyrrolidinedicarboxylic acid, 1-(1,1-dimethylethyl) 2-[(5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl] ester, (2S)- (9CI)
MF C32 H37 N O11

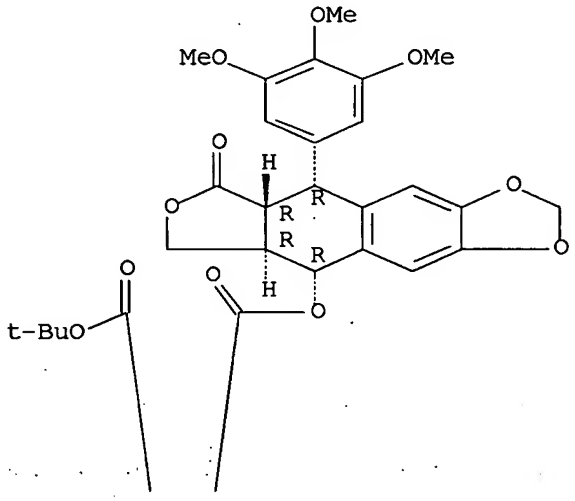
Absolute stereochemistry.



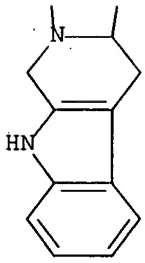
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L8 8 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 2H-Pyrido[3,4-b]indole-2,3-dicarboxylic acid, 1,3,4,9-tetrahydro-, 2-(1,1-dimethylethyl) 3-[(5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl] ester (9CI)
MF C39 H40 N2 O11

Absolute stereochemistry.



PAGE 2-A

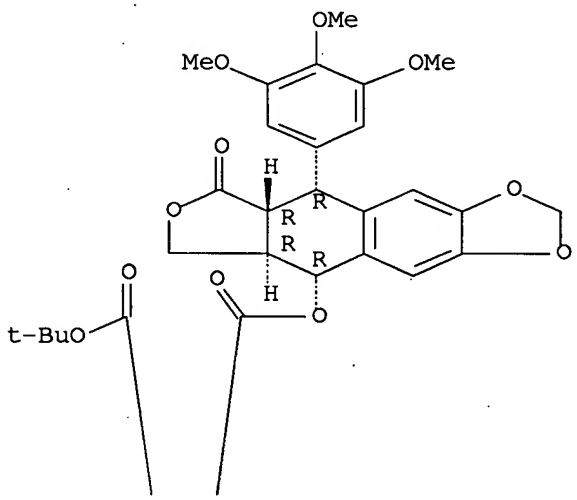


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

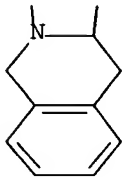
L8 8 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 2,3(1H)-Isoquinolinedicarboxylic acid, 3,4-dihydro-, 2-(1,1-dimethylethyl) 3-[(5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl] ester (9CI)
MF C37 H39 N O11

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

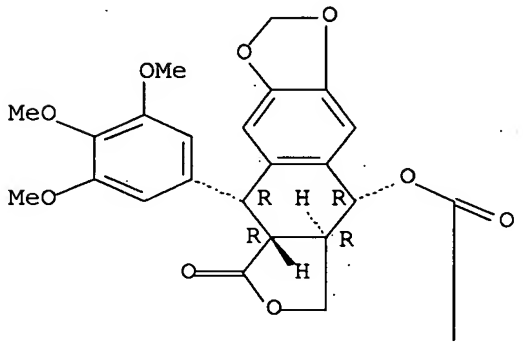


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

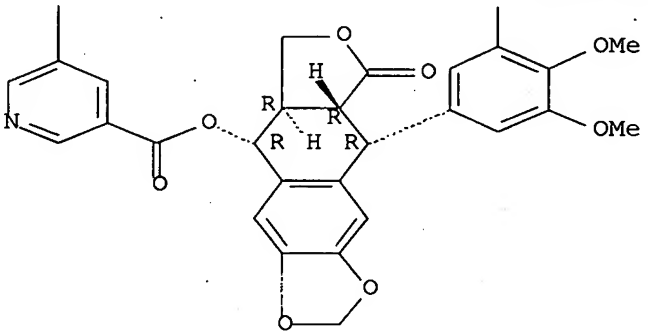
L8 8 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 3,5-Pyridinedicarboxylic acid, bis[(5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl] ester (9CI)
MF C51 H45 N O18

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



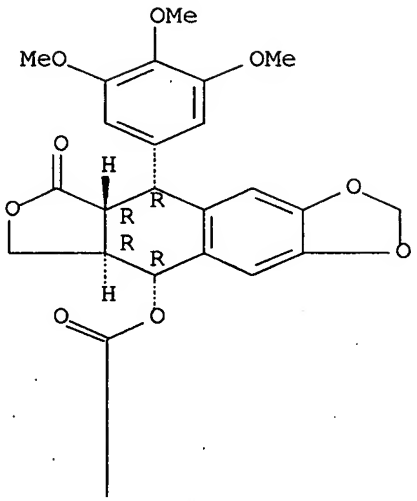
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L8 8 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 4H-1-Benzopyran-2-carboxylic acid, 4-oxo-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI)

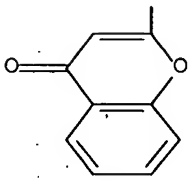
MF C32 H26 O11

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> FIL CAPLUS

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	224.00	228.14

FILE 'CAPLUS' ENTERED AT 10:04:03 ON 12 JUL 2007

FILE 'HOME' ENTERED AT 10:41:21 ON 12 JUL 2007

=> FIL REG
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 10:41:43 ON 12 JUL 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 11 JUL 2007 HIGHEST RN 942193-36-4
DICTIONARY FILE UPDATES: 11 JUL 2007 HIGHEST RN 942193-36-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> ACTIVATE YANG612240/A
L1 STR
L2 87 SEA FILE=REGISTRY SSS FUL L1

=> FIL STNG
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	1.80	2.01

FILE 'STNGUIDE' ENTERED AT 10:43:54 ON 12 JUL 2007
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Jul 6, 2007 (20070706/UP).

=>
Uploading
THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE
Do you want to switch to the Registry File?
Choice (Y/n):
Switching to the Registry File...
Some commands only work in certain files. For example, the EXPAND
command can only be used to look at the index in a file which has an
index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of
commands which can be used in this file.

=> FILE REGISTRY

COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.30	2.31

FILE 'REGISTRY' ENTERED AT 10:46:42 ON 12 JUL 2007

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 11 JUL 2007 HIGHEST RN 942193-36-4
DICTIONARY FILE UPDATES: 11 JUL 2007 HIGHEST RN 942193-36-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

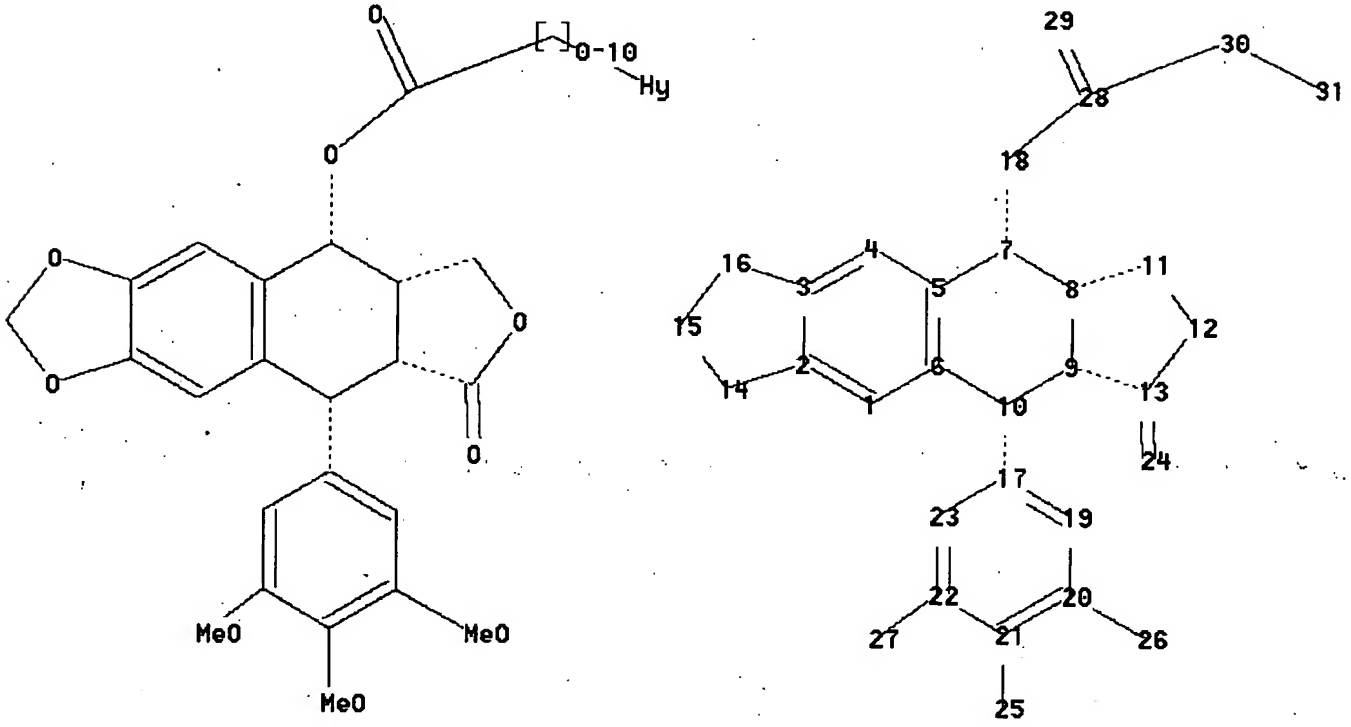
TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>
Uploading C:\Program Files\Stnexp\Queries\10612240B.str



chain nodes :
18 24 25 26 27 28 29 30 31
ring nodes :

```
1  2  3  4  5  6  7  8  9  10  11  12  13  14  15  16  17  19  20  21  22  23
chain bonds :
7-18  10-17  13-24  18-28  20-26  21-25  22-27  28-29  28-30  30-31
ring bonds :
1-2  1-6  2-3  2-14  3-4  3-16  4-5  5-6  5-7  6-10  7-8  8-9  8-11  9-10  9-13
11-12  12-13  14-15  15-16  17-19  17-23  19-20  20-21  21-22  22-23
exact/norm bonds :
2-14  3-16  5-7  6-10  7-8  7-18  8-9  8-11  9-10  9-13  10-17  11-12  12-13  13-24
14-15  15-16  18-28  28-29  30-31
exact bonds :
20-26  21-25  22-27  28-30
normalized bonds :
1-2  1-6  2-3  3-4  4-5  5-6  17-19  17-23  19-20  20-21  21-22  22-23


Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:Atom  8:Atom  9:Atom  10:Atom
11:Atom  12:Atom  13:Atom  14:Atom  15:Atom  16:Atom  17:Atom  18:CLASS  19:Atom
20:Atom  21:Atom  22:Atom  23:Atom  24:CLASS  25:CLASS  26:CLASS  27:CLASS
28:CLASS  29:CLASS  30:CLASS  31:Atom
Element Count :
Node 31: Unlimited
    N,NO




L3      STRUCTURE UPLOADED

=> D L3
L3 HAS NO ANSWERS
L3              STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY -  AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.


=> S SSS L3 SUBSET=L2 SAM
SAMPLE SUBSET SEARCH INITIATED 10:47:23 FILE 'REGISTRY'
SAMPLE SUBSET SCREEN SEARCH COMPLETED -        6 TO ITERATE

100.0% PROCESSED        6 ITERATIONS                                0 ANSWERS
SEARCH TIME: 00.00.01

PROJECTIONS (WITHIN SPECIFIED SUBSET):          ONLINE  **COMPLETE**
PROJECTED ITERATIONS (WITHIN SPECIFIED SUBSET):          6 TO      266
PROJECTED ANSWERS (WITHIN SPECIFIED SUBSET):             0 TO        0

L4            0 SEA SUB=L2 SSS SAM L3

=>
Uploading C:\Program Files\Stnexp\Queries\10612240C.str
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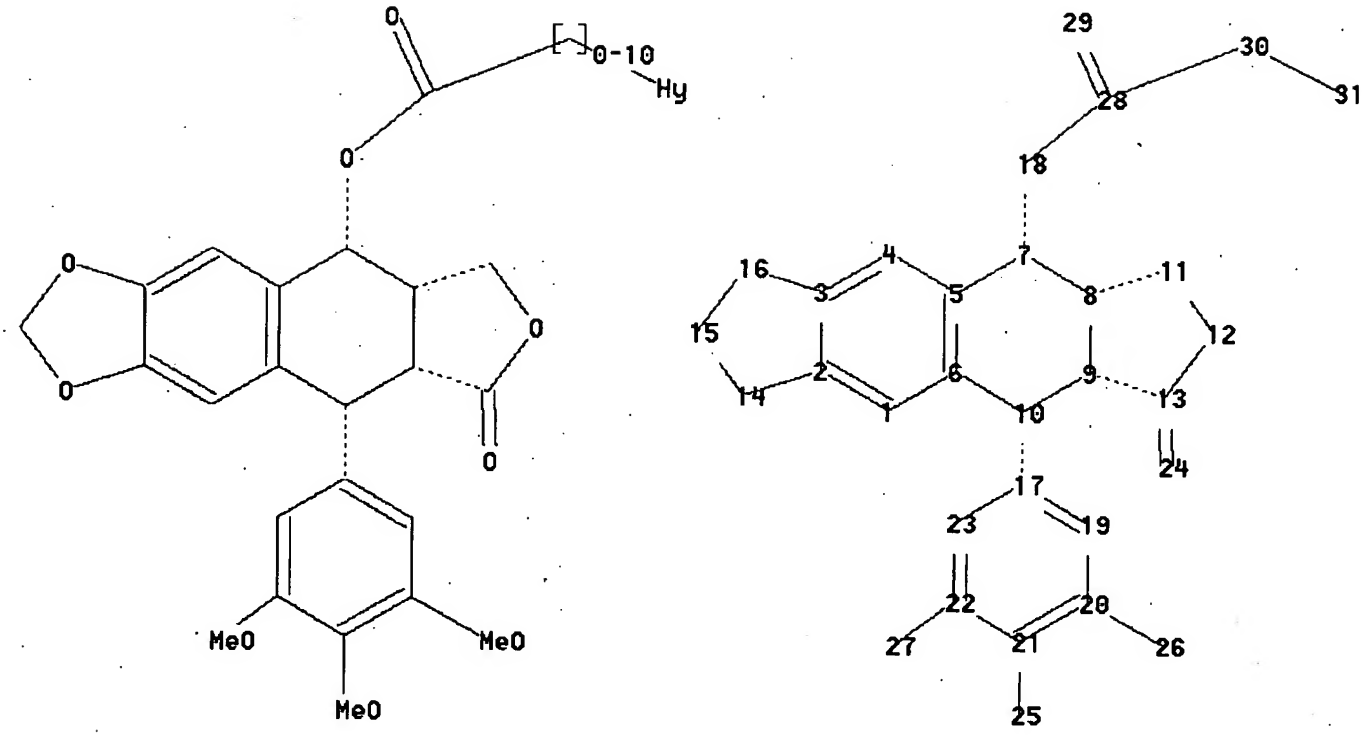

chain nodes :
18 24 25 26 27 28 29 30 31
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 19 20 21 22 23
chain bonds :
7-18 10-17 13-24 18-28 20-26 21-25 22-27 28-29 28-30 30-31
ring bonds :
1-2 1-6 2-3 2-14 3-4 3-16 4-5 5-6 5-7 6-10 7-8 8-9 8-11 9-10 9-13
11-12 12-13 14-15 15-16 17-19 17-23 19-20 20-21 21-22 22-23
exact/norm bonds :
2-14 3-16 5-7 6-10 7-8 7-18 8-9 8-11 9-10 9-13 10-17 11-12 12-13 13-24
14-15 15-16 18-28 28-29 30-31
exact bonds :
20-26 21-25 22-27 28-30
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 17-19 17-23 19-20 20-21 21-22 22-23

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:CLASS 19:Atom
20:Atom 21:Atom 22:Atom 23:Atom 24:CLASS 25:CLASS 26:CLASS 27:CLASS
28:CLASS 29:CLASS 30:CLASS 31:Atom
Element Count :
Node 31: Unlimited
N,N0
O,O1-2
S,S1-2

L5 STRUCTURE UPLOADED

```
=> D L5
L5 HAS NO ANSWERS
L5                STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY -  AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.


=> S SSS L5 SUBSET=L2 SAM
SAMPLE SUBSET SEARCH INITIATED 10:50:41 FILE 'REGISTRY'
SAMPLE SUBSET SCREEN SEARCH COMPLETED -        6 TO ITERATE

100.0% PROCESSED         6 ITERATIONS                                  0 ANSWERS
SEARCH TIME: 00.00.01

PROJECTIONS (WITHIN SPECIFIED SUBSET):          ONLINE  **COMPLETE**
PROJECTED ITERATIONS (WITHIN SPECIFIED SUBSET):          6 TO      266
PROJECTED ANSWERS (WITHIN SPECIFIED SUBSET):             0 TO        0

L6             0 SEA SUB=L2 SSS SAM L5

=> S SSS L5 SUBSET=L2 FULL
FULL SUBSET SEARCH INITIATED 10:51:05 FILE 'REGISTRY'
FULL SUBSET SCREEN SEARCH COMPLETED -       87 TO ITERATE

100.0% PROCESSED        87 ITERATIONS                                 0 ANSWERS
SEARCH TIME: 00.00.01

L7             0 SEA SUB=L2 SSS FUL L5

=>
Uploading C:\Program Files\Stnexp\Queries\10612240D.str
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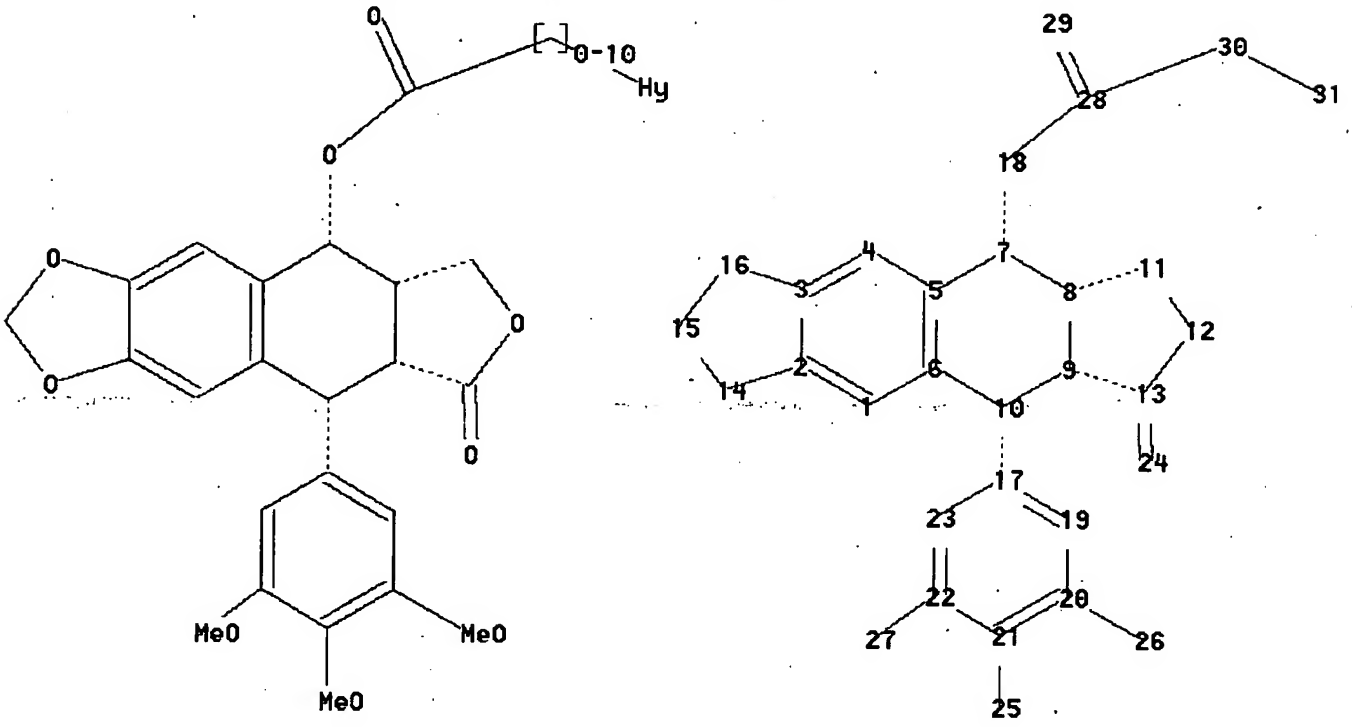


chain nodes :

```
18  24  25  26  27  28  29  30  31
ring nodes :
1  2  3  4  5  6  7  8  9  10  11  12  13  14  15  16  17  19  20  21  22  23
chain bonds :
7-18  10-17  13-24  18-28  20-26  21-25  22-27  28-29  28-30  30-31
ring bonds :
1-2  1-6  2-3  2-14  3-4  3-16  4-5  5-6  5-7  6-10  7-8  8-9  8-11  9-10  9-13
11-12  12-13  14-15  15-16  17-19  17-23  19-20  20-21  21-22  22-23
exact/norm bonds :
2-14  3-16  5-7  6-10  7-8  7-18  8-9  8-11  9-10  9-13  10-17  11-12  12-13  13-24
14-15  15-16  18-28  28-29  30-31
exact bonds :
20-26  21-25  22-27  28-30
normalized bonds :
1-2  1-6  2-3  3-4  4-5  5-6  17-19  17-23  19-20  20-21  21-22  22-23

Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:Atom  8:Atom  9:Atom  10:Atom
11:Atom  12:Atom  13:Atom  14:Atom  15:Atom  16:Atom  17:Atom  18:CLASS  19:Atom
20:Atom  21:Atom  22:Atom  23:Atom  24:CLASS  25:CLASS  26:CLASS  27:CLASS
28:CLASS  29:CLASS  30:CLASS  31:Atom
Element Count :
Node 31: Unlimited
    0,01-2



L8      STRUCTURE UPLOADED

=> D L8
L8 HAS NO ANSWERS
L8              STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY -  AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.


=> S SSS L8 SUBSET=L2 SAM
SAMPLE SUBSET SEARCH INITIATED 10:58:24 FILE 'REGISTRY'
SAMPLE SUBSET SCREEN SEARCH COMPLETED -        6 TO ITERATE

100.0% PROCESSED        6 ITERATIONS                                  0 ANSWERS
SEARCH TIME: 00.00.01

PROJECTIONS (WITHIN SPECIFIED SUBSET):          ONLINE  **COMPLETE**
PROJECTED ITERATIONS (WITHIN SPECIFIED SUBSET):          6 TO      266
PROJECTED ANSWERS (WITHIN SPECIFIED SUBSET):             0 TO        0

L9            0 SEA SUB=L2 SSS SAM L8

=> S SSS L8 SUBSET=L2 FULL
FULL SUBSET SEARCH INITIATED 10:58:42 FILE 'REGISTRY'
FULL SUBSET SCREEN SEARCH COMPLETED -       87 TO ITERATE

100.0% PROCESSED       87 ITERATIONS                                  7 ANSWERS
```

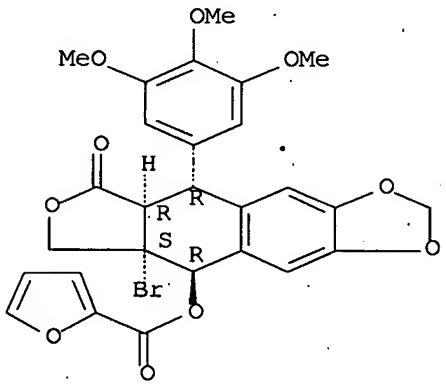
SEARCH TIME: 00.00.01

L10 7 SEA SUB=L2 SSS FUL L8

=> D SCAN

L10 7 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 2-Furancarboxylic acid, (5R,5aS,8aR,9R)-5a-bromo-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI)
MF C27 H23 Br O10

Absolute stereochemistry. Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> FIL CAPLU

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	90.75	93.06

FILE 'CAPLUS' ENTERED AT 10:59:08 ON 12 JUL 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 12 Jul 2007 VOL 147 ISS 3
FILE LAST UPDATED: 11 Jul 2007 (20070711/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

http://www.cas.org/infopolicy.html

=> S L10
L11 4 L10

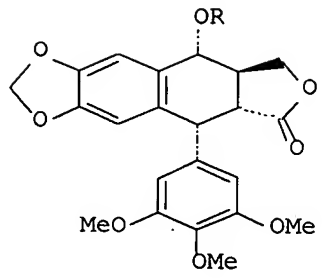
=> D IBIB ABS HITSTR 1-4

L11 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:17018 CAPLUS Full-text
DOCUMENT NUMBER: 142:113818
TITLE: Preparation of podophyllotoxin derivatives for use in pharmaceutical compositions for the treatment of cancer
INVENTOR(S): Yang, Li-Xi
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 24 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005004169	A1	20050106	US 2003-612240	20030701
CA 2530037	A1	20050217	CA 2004-2530037	20040630
WO 2005014536	A2	20050217	WO 2004-US21224	20040630
WO 2005014536	A3	20050414		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1643987	A2	20060412	EP 2004-777395	20040630
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				

PRIORITY APPLN. INFO.: US 2003-612240 A 20030701
WO 2004-US21224 W 20040630

OTHER SOURCE(S): MARPAT 142:113818
GI



I

AB Podophyllotoxin derivs., such as I [R = CO-(CH2)m-X-R1; m = 0-10; X = S, O, N, bond; R1 = substituted Ph, substituted cycloalkyl having 3 to 7 carbons forming the ring, optionally substituted fused heterocycle, naphthyl, anthraquinone, hemisuccinic acid etc.], were prepared for use as antitumor agents. When combined with suitable pharmaceutical excipients, these compds. are useful for treating various types of cancer. Thus, podophyllotoxin I (R = H) underwent an acylation reaction with F-4-C6H4OCH2CO2H using EDCI and DMAP in CH2Cl2 to give 4-(fluorophenoxyacetyl)podophyllotoxin I (R = COCH2OC6H4-4-F). The prepared podophyllotoxin derivs. were assayed in vitro for inhibition of growth of HCT116 cells and assayed in vivo for antitumor activity in C3H/HeJ mice bearing MTG-B tumors.

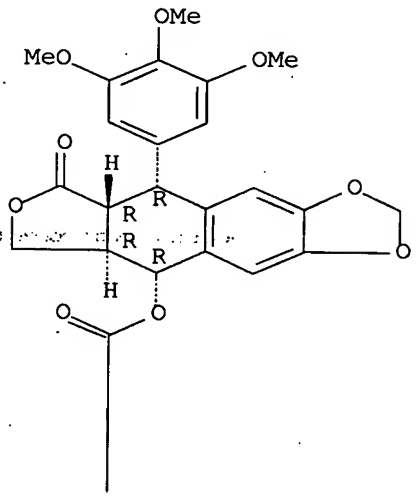
IT 819805-40-8P 819805-41-9P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of podophyllotoxin ester derivs. for use in pharmaceutical compns. for treatment of cancer)

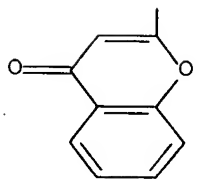
RN 819805-40-8 CAPLUS

CN 4H-1-Benzopyran-2-carboxylic acid, 4-oxo-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

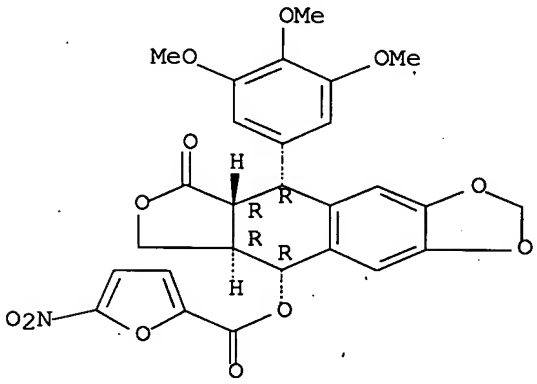
PAGE 1-A





RN 819805-41-9 CAPLUS
CN 2-Furancarboxylic acid, 5-nitro-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

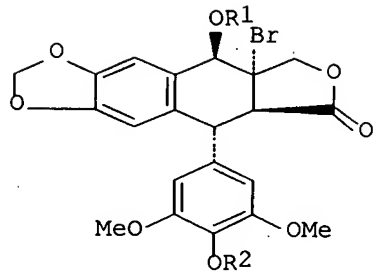
Absolute stereochemistry.



L11 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:372786 CAPLUS Full-text
DOCUMENT NUMBER: 138:337884
TITLE: 3α-Bromoepipodophyllotoxin-4-substituted derivative preparation and their anticancer activities
INVENTOR(S): Ma, Weiyong; He, Yong; Zhang, Chunnian
PATENT ASSIGNEE(S): Shanghai Inst. of Medical Industry, State Medicine Management Bureau, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 19 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1338457	A	20020306	CN 2000-119628	20000818
PRIORITY APPLN. INFO.:			CN 2000-119628	20000818

OTHER SOURCE(S): CASREACT 138:337884; MARPAT 138:337884
GI



I

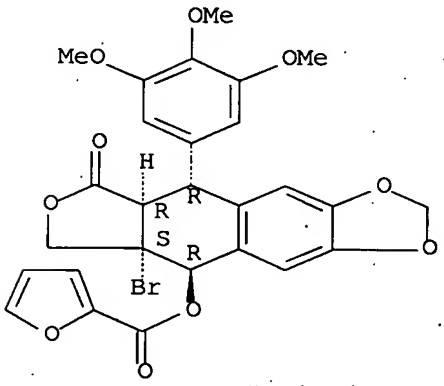
AB Title compds. I (R1 = H, alkyl, ester group, or substituted alkyl; R2 = H or methyl) were synthesized from epipodophyllotoxins via dehydration, obtained 3α,4-anhydro-epipodophyllotoxin, dalton reaction with N-bromosuccinimide or selective hydrolysis with hydrogen bromide, giving I (R1 = H), further etherification with alc. or esterification with carboxylic acid in the presence of trifluoroborane di-Et etherate as catalyst. Title compds. have higher inhibitory effects on the growth of L1,210 and KB cells than VP-16.

IT 516515-23-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(3α-bromoepipodophyllotoxin-4-substituted derivs. prepn and their bioactivities)

RN 516515-23-4 CAPLUS

CN 2-Furancarboxylic acid, (5R,5aS,8aR,9R)-5a-bromo-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L11 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1999:534766 CAPLUS Full-text

DOCUMENT NUMBER: 132:3273

TITLE: Synthesis and spectral characteristics of some unusual fatty esters of podophyllotoxin

AUTHOR(S): Lie Ken Jie, M. S. F.; Mustafa, J.; Khysar Pasha, M.

CORPORATE SOURCE: Department of Chemistry, The University of Hong Kong, Hong Kong, Peop. Rep. China

SOURCE: Chemistry and Physics of Lipids (1999), 100(1-2),

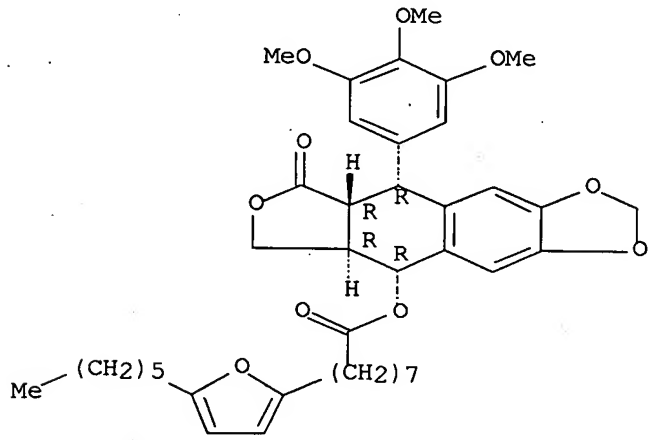
165-170
CODEN: CPLIA4; ISSN: 0009-3084
PUBLISHER: Elsevier Science Ireland Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Five fatty ester derivs. of podophyllotoxin have been prepared by reacting the fatty acids with the hydroxy group of podophyllotoxin in the presence of dimethylaminopyridine and N,N-dicyclohexylcarbodiimide. The fatty acids incorporated are: 9,12-epoxy-9,11-octadecadienoic acid, octadec-11E-en-9-ynoic acid, 11,12-E-epoxy-octadec-9-ynoic acid, octadeca-9Z,11E-dienoic acid and 9,10-dibromooctadecanoic acid. Average yields were >95% and the structures of the products were confirmed by a combination of NMR spectroscopic and mass spectrometric analyses.

IT 251109-11-2P 251109-13-4P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and spectral characteristics of some fatty esters of podophyllotoxin)

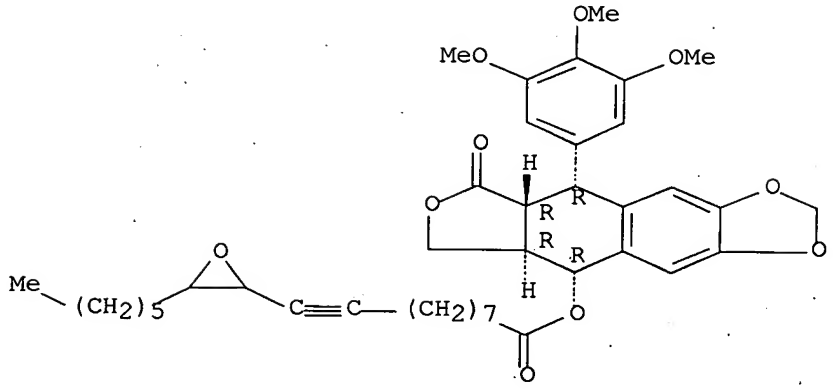
RN 251109-11-2 CAPLUS
CN 2-Furanoctanoic acid, 5-hexyl-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



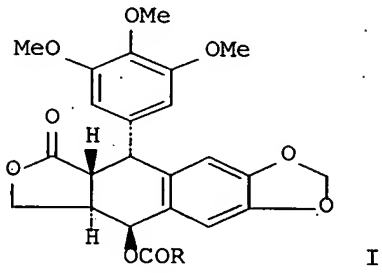
RN 251109-13-4 CAPLUS
CN 9-Decynoic acid, 10-(3-hexyloxiranyl)-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:291310 CAPLUS Full-text
DOCUMENT NUMBER: 129:175488
TITLE: Synthesis of epipodophyllotoxin carboxylates and antitumor activity in vitro
AUTHOR(S): Pan, Jianlin; Wang, Yanguang; Chen, Yaozhu
CORPORATE SOURCE: Department of Chemistry, Zhejiang University, Hangzhou, 310027, Peop. Rep. China
SOURCE: Yaoxue Xuebao (1997), 32(12), 898-901
CODEN: YHHPAL; ISSN: 0513-4870
PUBLISHER: Chinese Academy of Medical Sciences, Institute of Materia Media
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
GI



I

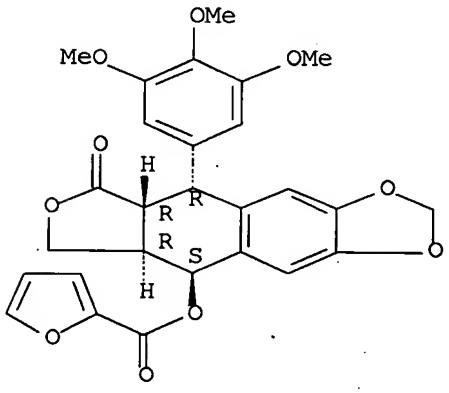
AB Epipodophyllotoxin carboxylates [I; R = Ph, o-acetoxyphenyl, m-tolyl, styryl, 3,5-dinitrophenyl, 2-furyl, 2-furylethenyl] were prepared via reacting podophyllotoxin with the appropriate organic acids under the catalysis of BF3.Et2O. The compds. showed significant antitumor activities against mouse leukemia P388 and human stomach cancer SGC-7901 in pharmacol. tests in vitro.

IT 211615-64-4P 211615-65-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(synthesis of antitumor epipodophyllotoxin carboxylates)

RN 211615-64-4 CAPLUS

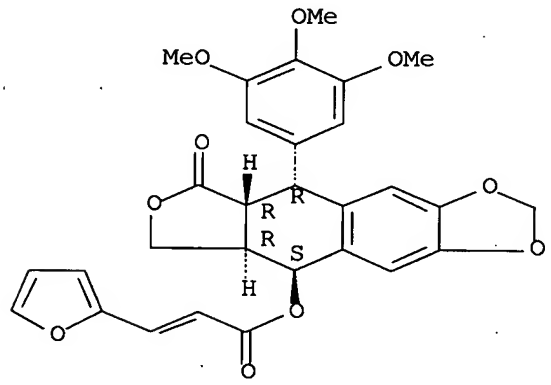
CN 2-Furancarboxylic acid, (5S,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 211615-65-5 CAPLUS
CN 2-Propenoic acid, 3-(2-furanyl)-, (5S,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



=> SAVE L10 YAN612440/A TEMP
ANSWER SET NOT SAVED.
THE ANSWER SET WAS CREATED IN FILE 'REGISTRY'.
USE THE FILE COMMAND TO CHANGE TO THE CORRECT FILE.
Answer sets must be saved in the same file in which they were created.

=> D HIS

(FILE 'HOME' ENTERED AT 10:41:21 ON 12 JUL 2007)

FILE 'REGISTRY' ENTERED AT 10:41:43 ON 12 JUL 2007

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                ACTIVATE YANG612240/A
                ---------
L1               STR
L2            87 SEA FILE=REGISTRY SSS FUL L1
                 ---------

     FILE 'STNGUIDE' ENTERED AT 10:43:54 ON 12 JUL 2007

     FILE 'REGISTRY' ENTERED AT 10:46:42 ON 12 JUL 2007
L3               STRUCTURE UPLOADED
L4             0 S SSS L3 SAM SUB=L2
L5               STRUCTURE UPLOADED
L6             0 S SSS L5 SAM SUB=L2
L7             0 S SSS L5 FULL SUB=L2
L8               STRUCTURE UPLOADED
L9             0 S SSS L8 SAM SUB=L2
L10            7 S SSS L8 FULL SUB=L2

     FILE 'CAPLUS' ENTERED AT 10:59:08 ON 12 JUL 2007
L11            4 S L10

=> LOGOFF Y
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                    22.96     116.02

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                    -3.12      -3.12

STN INTERNATIONAL LOGOFF AT 11:01:30 ON 12 JUL 2007
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FILE COVERS 1907 - 12 Jul 2007 VOL 147 ISS 3
FILE LAST UPDATED: 11 Jul 2007 (20070711/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

http://www.cas.org/infopolicy.html

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=> D HIS

     (FILE 'HOME' ENTERED AT 09:45:20 ON 12 JUL 2007)

     FILE 'REGISTRY' ENTERED AT 09:45:44 ON 12 JUL 2007
L1             STRUCTURE UPLOADED
L2           6 S L1 SSS SAM

     FILE 'CAPLUS' ENTERED AT 09:47:09 ON 12 JUL 2007
               E US2003-612240/APPS
L3           1 S E3
               SEL RN L3

     FILE 'REGISTRY' ENTERED AT 09:48:20 ON 12 JUL 2007
L4          52 S E1-E52
L5          87 S L1 SSS FULL
L6             STRUCTURE UPLOADED
L7          80 S L6 FULL SUB=L5
L8           8 S L4 AND L5

     FILE 'CAPLUS' ENTERED AT 10:04:03 ON 12 JUL 2007

=> S L7
L9          19 L7

=> FIL STNG
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                 ENTRY    SESSION
FULL ESTIMATED COST                               0.47     228.61

FILE 'STNGUIDE' ENTERED AT 10:04:38 ON 12 JUL 2007
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Jul  6, 2007 (20070706/UP).

=> FIL CAPLUS
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                 ENTRY    SESSION
FULL ESTIMATED COST                               0.60     229.21

FILE 'CAPLUS' ENTERED AT 10:10:31 ON 12 JUL 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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FILE COVERS 1907 - 12 Jul 2007 VOL 147 ISS 3
FILE LAST UPDATED: 11 Jul 2007 (20070711/ED)

=> D IBIB ABS HITSTR L9 1-19

L9 ANSWER 1 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:263203 CAPLUS Full-text
DOCUMENT NUMBER: 144:460304
TITLE: Synthesis and biological evaluation of new spin-labeled derivatives of podophyllotoxin
AUTHOR(S): Jin, Yan; Chen, Shi-Wu; Tian, Xuan
CORPORATE SOURCE: State Key Laboratory of Applied Organic Chemistry, Lanzhou University, Lanzhou, 730000, Peop. Rep. China
SOURCE: Bioorganic & Medicinal Chemistry (2006), 14(9), 3062-3068
CODEN: BMECEP; ISSN: 0968-0896
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 144:460304

AB In order to find compds. with superior bioactivity and less toxicity, a series of spin-labeled podophyllotoxin derivs. were synthesized and tested for the partition coeffs. and cytotoxicity against P-388 and A-549. Furthermore, we also determined antioxidant activities of target mol. in tissues of SD rats by the TBA method. Results revealed that most synthesized compds. showed more significant cytotoxicity against P-388 and A-549 in vitro than VP-16. Among them, the tetramethylpiperidine derivative exhibited most potent cytotoxicity against P-388 and A-549 cells (IC50 is <0.01 and 0.13 μM, resp.). Also, the antioxidative activities showed that the modified compds. of 4'-demethylepipodophyllotoxin are higher than those of podophyllotoxin series. The relationship between the cytotoxicity and antioxidative activity discussed.

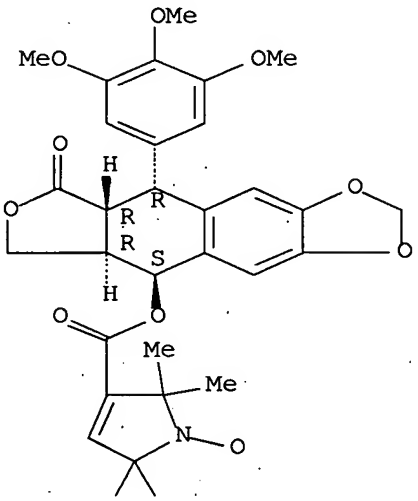
IT 193404-42-1P 886757-90-0P 886757-91-1P
886757-92-2P 886757-93-3P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(synthesis and biol. evaluation of spin-labeled derivs. of podophyllotoxin)

RN 193404-42-1 CAPLUS
CN 1H-Pyrrol-1-yloxy, 3-[[[(5S,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-

yl]oxy]carbonyl]-2,5-dihydro-2,2,5,5-tetramethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

PAGE 1-A

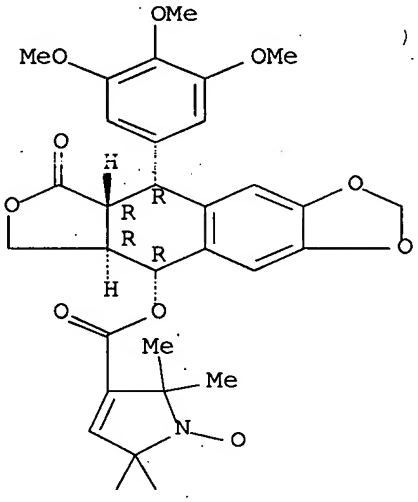


PAGE 2-A

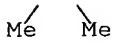
RN 886757-90-0 CAPLUS
CN 1H-Pyrrol-1-yloxy, 3-[[[(5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]oxy]carbonyl]-2,5-dihydro-2,2,5,5-tetramethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

PAGE 1-A



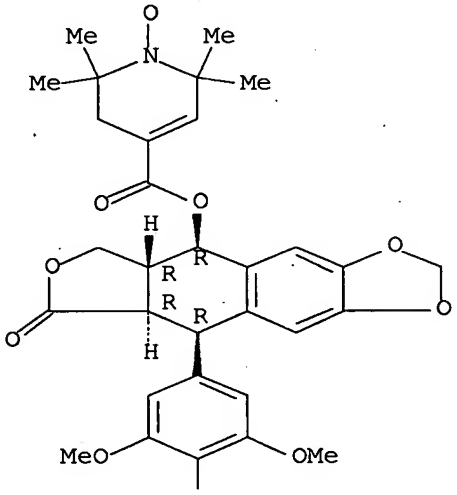
PAGE 2-A



RN 886757-91-1 CAPLUS
CN 1(2H)-Pyridinyloxy, 4-[[[(5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]oxy]carbonyl]-3,6-dihydro-2,2,6,6-tetramethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

PAGE 1-A

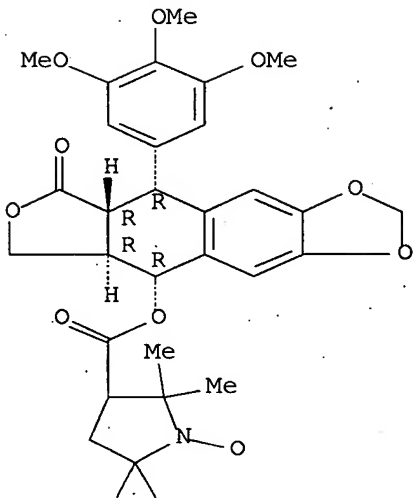


PAGE 2-A

RN 886757-92-2 CAPLUS
CN 1-Pyrrolidinyloxy, 3-[[[(5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]oxy]carbonyl]-2,2,5,5-tetramethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



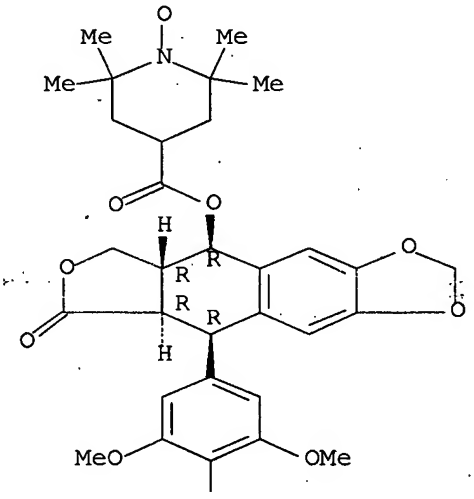
PAGE 2-A

RN 886757-93-3 CAPLUS

CN 1-Piperidinyloxy, 4-[[[(5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]oxy]carbonyl]-2,2,6,6-tetramethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

PAGE 1-A



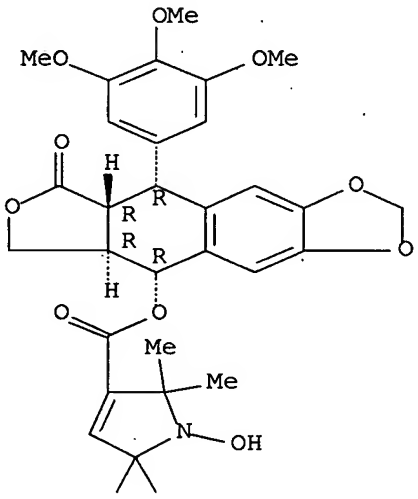
PAGE 2-A

OMe

IT 886758-00-5P 886758-01-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis and biol. evaluation of spin-labeled derivs. of podophyllotoxin)
RN 886758-00-5 CAPLUS
CN 1H-Pyrrole-3-carboxylic acid, 2,5-dihydro-1-hydroxy-2,2,5,5-tetramethyl-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



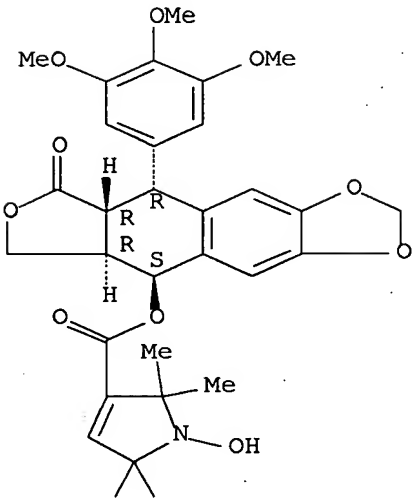
PAGE 2-A

Me Me

RN 886758-01-6 CAPLUS
CN 1H-Pyrrole-3-carboxylic acid, 2,5-dihydro-1-hydroxy-2,2,5,5-tetramethyl-, (5S,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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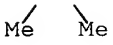
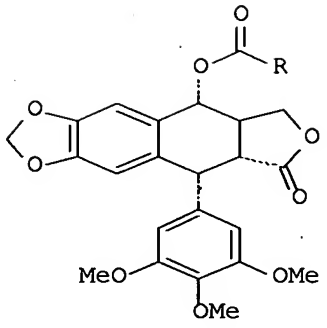


REFERENCE COUNT: 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

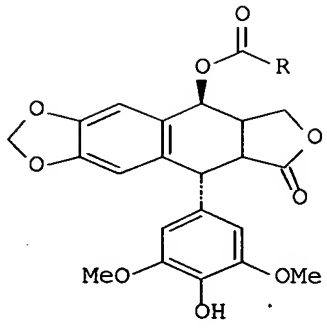
L9 ANSWER 2 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:133229 CAPLUS Full-text
DOCUMENT NUMBER: 145:7931
TITLE: Method of preparation pyridyl podophyllotoxin compounds for preparation insecticide
INVENTOR(S): Gao, Rong; Xiao, Hang; Di, Xudong; Liu, Yanqing
PATENT ASSIGNEE(S): Nanjing Medical University, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 25 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1663955	A	20050907	CN 2005-10037723	20050202
PRIORITY APPLN. INFO.:			CN 2005-10037723	20050202

OTHER SOURCE(S): CASREACT 145:7931; MARPAT 145:7931
GI



I



II

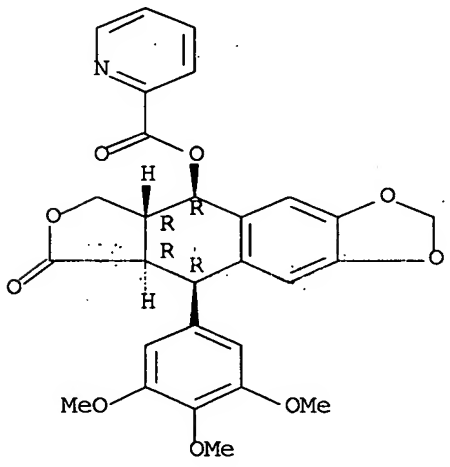
AB The structures of pyridyl podophyllotoxin compds. I and II [R = pyridyl group] are presented. The method comprises stirring organic acid and 4'-demethyl podophyllotoxin (at mole ratio of 1:1) in the presence of catalyst (4-dimethylaminopyridine) in anhydrous organic solvent (ether, dichloromethane, carbon tetrachloride, chloroform) at room temperature for 5-10 mins; then adding DCC and reacting for 1-3 h; filtering, concentrating filtrate; purifying on column and recrystg. to give product. The organic acid can be isonicotinic acid, nicotinic acid, picolinic acid, 2-chloro-nicotinic acid, 6-chloro-nicotinic acid, 5-bromo-nicotinic acid. The pyridyl podophyllotoxin compds. can be used for preparation insecticide.

IT 608524-44-3P 608524-47-6P 888029-85-4P
888029-86-5P 888029-87-6P 888029-88-7P
RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of pyridylpodophyllotoxin derivs. as insecticide)

RN 608524-44-3 CAPLUS

CN 2-Pyridinecarboxylic acid, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



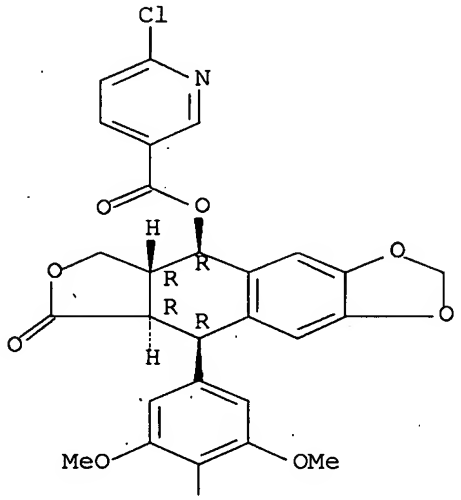
RN 608524-47-6 CAPLUS

CN 3-Pyridinecarboxylic acid, 6-chloro-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-

1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

PAGE 1-A



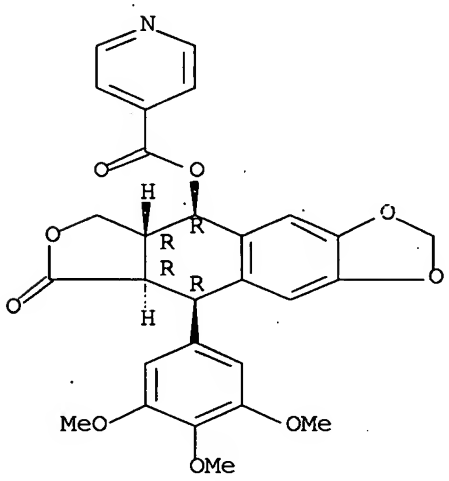
PAGE 2-A

OMe

RN 888029-85-4 CAPLUS

CN 4-Pyridinecarboxylic acid, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

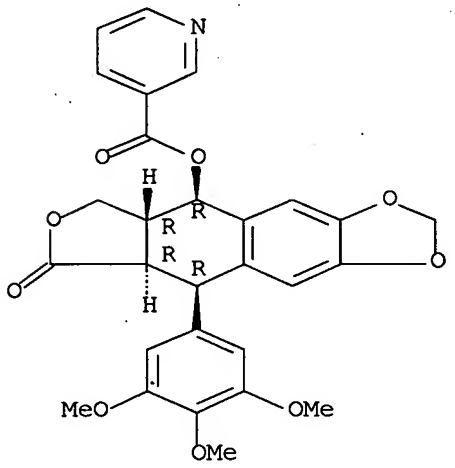
Absolute stereochemistry. Rotation (-).



RN 888029-86-5 CAPLUS

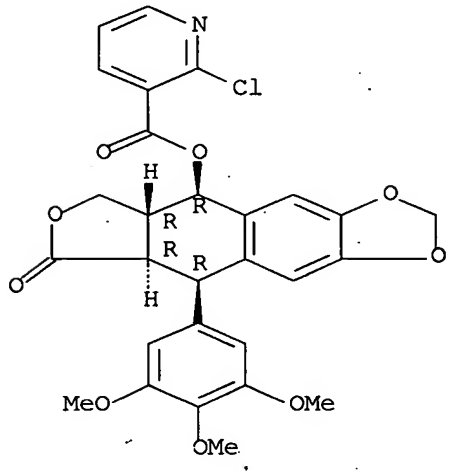
CN 3-Pyridinecarboxylic acid, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



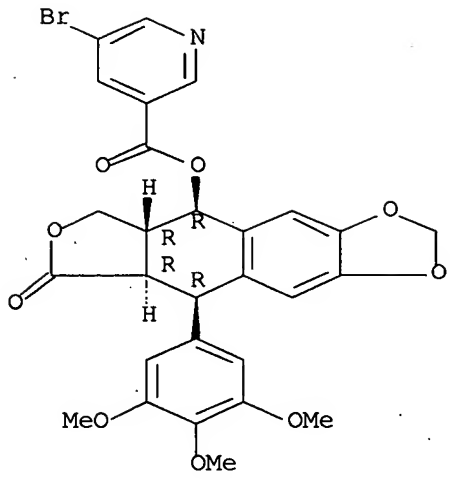
RN 888029-87-6 CAPLUS
CN 3-Pyridinecarboxylic acid, 2-chloro-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 888029-88-7 CAPLUS
CN 3-Pyridinecarboxylic acid, 5-bromo-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

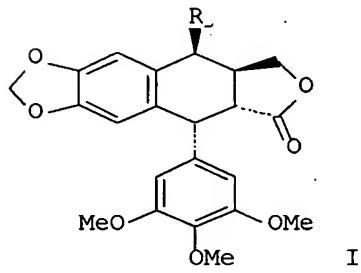
Absolute stereochemistry. Rotation (-).



L9 ANSWER 3 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:54534 CAPLUS Full-text
DOCUMENT NUMBER: 144:170828
TITLE: Preparation of epipodophyllotoxin derivatives and their use as insecticides
INVENTOR(S): Li, Guangze; Feng, Juntao; Hao, Shuanghong; He, Jun; Duan, Ling; Zhang, Xing
PATENT ASSIGNEE(S): Biorational Pesticide Research and Service Center, Northwest Sci-Tech University of Agriculture and Forestry, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 67 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1590388	A	20050309	CN 2003-10105870	20031030

PRIORITY APPLN. INFO.: CN 2003-10105870 20031030
GI



I

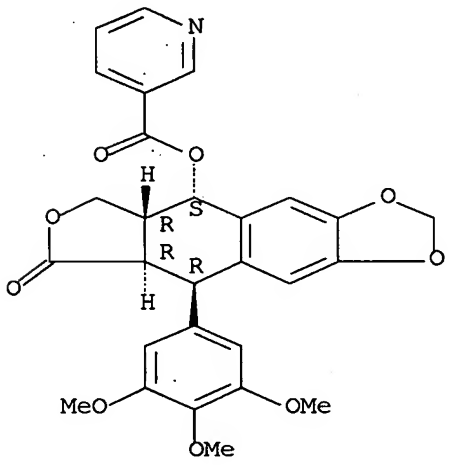
AB Epipodophyllotoxin derivs. I [wherein R = acetyl, propionyl, mercapto, etc.] were prepared and found to have insecticidal activity toward Mythimna separata Walker, Plutella xylostella and Pieris rapae. Therefore, I are useful for the treatment or prevention of these insects.

IT 874661-48-0P 874661-49-1P
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of epipodophyllotoxin derivs. and their use as insecticides)

RN 874661-48-0 CAPLUS

CN 3-Pyridinecarboxylic acid, (5S,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

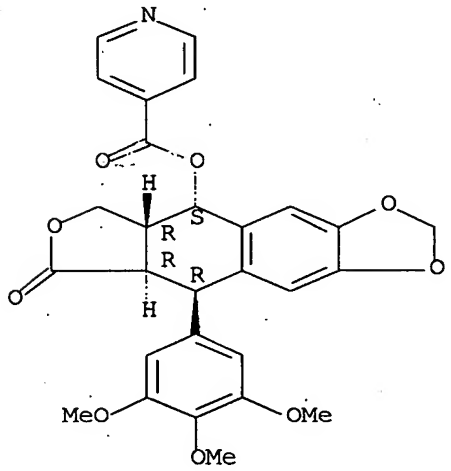
Absolute stereochemistry.



RN 874661-49-1 CAPLUS

CN 4-Pyridinecarboxylic acid, (5S,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L9 ANSWER 4 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:17018 CAPLUS Full-text
DOCUMENT NUMBER: 142:113818
TITLE: Preparation of podophyllotoxin derivatives for use in pharmaceutical compositions for the treatment of cancer
INVENTOR(S): Yang, Li-Xi
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 24 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005004169	A1	20050106	US 2003-612240	20030701
CA 2530037	A1	20050217	CA 2004-2530037	20040630
WO 2005014536	A2	20050217	WO 2004-US21224	20040630
WO 2005014536	A3	20050414		
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RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1643987	A2	20060412	EP 2004-777395	20040630
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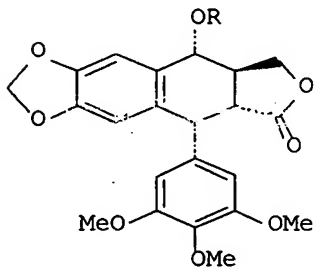
PRIORITY APPLN. INFO.: US 2003-612240 A 20030701
WO 2004-US21224 W 20040630

OTHER SOURCE(S): MARPAT 142:113818
GI



I

AB Podophyllotoxin derivs., such as I [R = CO-(CH2)m-X-R1; m = 0-10; X = S, O, N, bond; R1 = substituted Ph, substituted cycloalkyl having 3 to 7 carbons forming the ring, optionally substituted fused heterocycle, naphthyl,

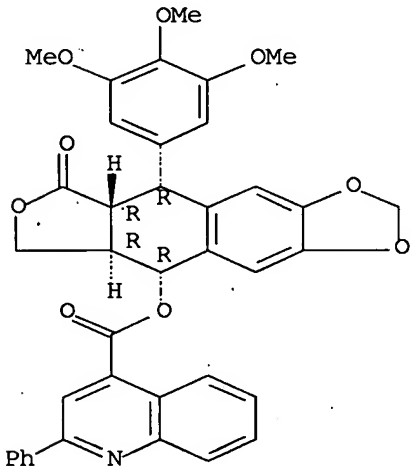
anthraquinone, hemisuccinic acid etc.], were prepared for use as antitumor agents. When combined with suitable pharmaceutical excipients, these compds. are useful for treating various types of cancer. Thus, podophyllotoxin I (R = H) underwent an acylation reaction with F-4-C6H4OCH2CO2H using EDCI and DMAP in CH2Cl2 to give 4-(fluorophenoxyacetyl)podophyllotoxin I (R = COCH2OC6H4-4-F). The prepared podophyllotoxin derivs. were assayed in vitro for inhibition of growth of HCT116 cells and assayed in vivo for antitumor activity in C3H/HeJ mice bearing MTG-B tumors.

IT 819805-43-1P 819805-44-2P 819805-46-4P
819805-49-7P 819805-50-0P 819805-52-2P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of podophyllotoxin ester derivs. for use in pharmaceutical compns. for treatment of cancer)

RN 819805-43-1 CAPLUS

CN 4-Quinolinecarboxylic acid, 2-phenyl-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

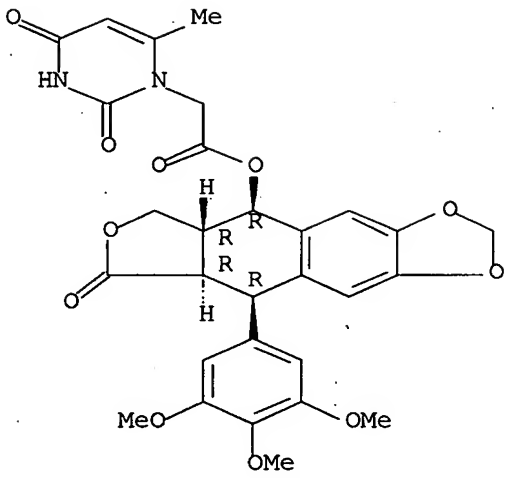
Absolute stereochemistry.



RN 819805-44-2 CAPLUS

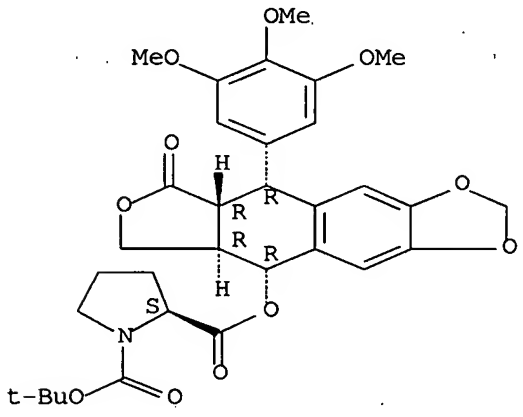
CN 1(2H)-Pyrimidineacetic acid, 3,4-dihydro-6-methyl-2,4-dioxo-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 819805-46-4 CAPLUS
CN 1,2-Pyrrolidinedicarboxylic acid, 1-(1,1-dimethylethyl) 2-[(5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl] ester, (2S)- (9CI) (CA INDEX NAME)

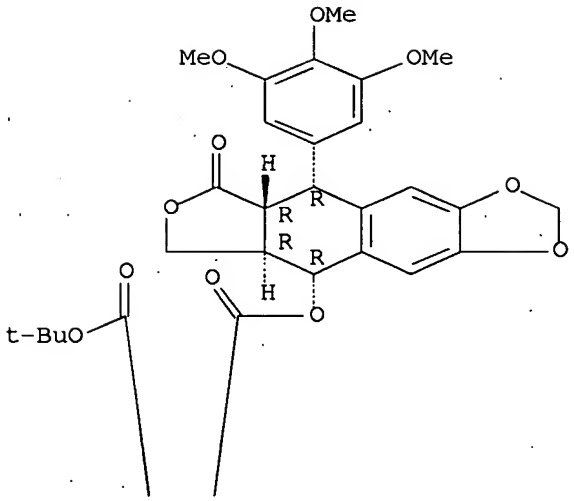
Absolute stereochemistry.



RN 819805-49-7 CAPLUS
CN 2H-Pyrido[3,4-b]indole-2,3-dicarboxylic acid, 1,3,4,9-tetrahydro-, 2-(1,1-dimethylethyl) 3-[(5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl] ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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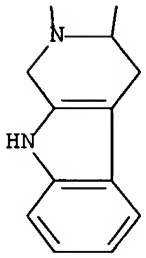
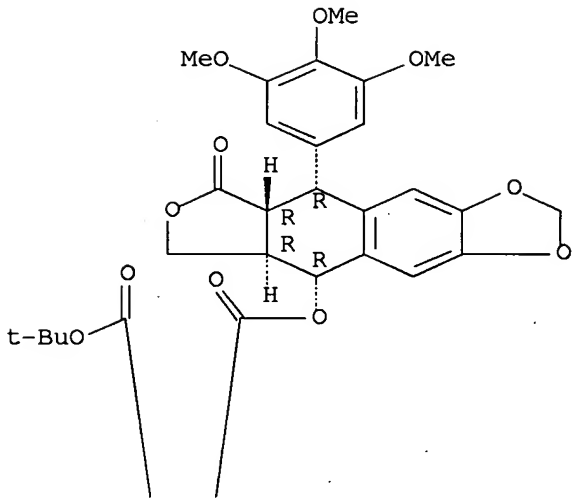


RN 819805-50-0 CAPLUS
CN 2,3(1H)-Isoquinolinedicarboxylic acid, 3,4-dihydro-, 2-(1,1-dimethylethyl) 3-[(5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl] ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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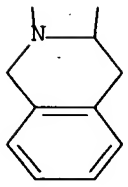
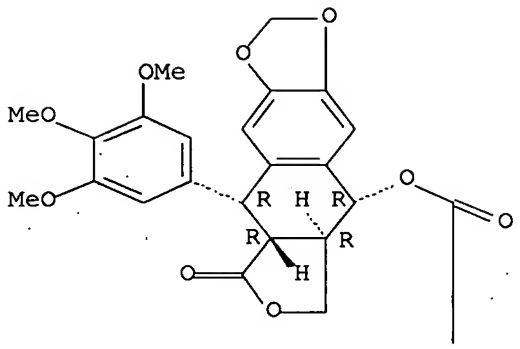


RN 819805-52-2 CAPLUS
CN 3,5-Pyridinedicarboxylic acid, bis[(5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl] ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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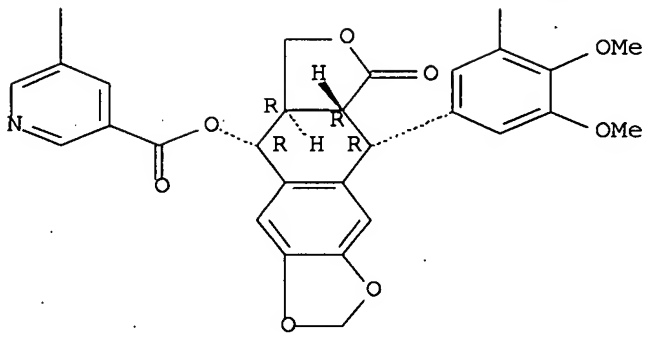
PAGE 2-A



L9 ANSWER 5 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:779090 CAPLUS Full-text
DOCUMENT NUMBER: 139:292103
TITLE: Preparation of new podophyllotoxin derivatives and their therapeutic application
INVENTOR(S): Potier, Pierre; Kerkar, Brahim
PATENT ASSIGNEE(S): Fr.
SOURCE: Fr. Demande, 40 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2837824	A1	20031003	FR 2002-3903	20020328
FR 2837824	B1	20060303		
WO 2003082875	A2	20031009	WO 2003-FR983	20030328

WO 2003082875 A3 20040401

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2003244727 A1 20031013 AU 2003-244727 20030328

PRIORITY APPLN. INFO.: FR 2002-3903 A 20020328

WO 2003-FR983 W 20030328

OTHER SOURCE(S): CASREACT 139:292103; MARPAT 139:292103

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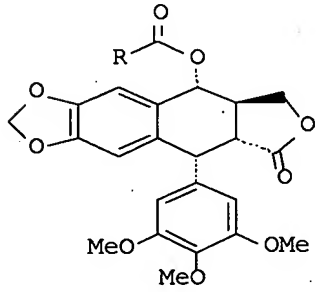

I

AB The invention relates to podophyllotoxin derivs. I [R = CH2NHC(:O)R2, CH(OH)CHR17NHC(:O)R3, CH(OH)CHPhNHC(:O)R3, pyrrolyl-, pyridyl-, imidazolyl-, pyrazinylalkylene or -vinyl, N-oxopyridyl, quinolinyl, oxodihydroquinolinyl, etc.; R2 = (un)substituted pyrrole , imidazole, pyridine, pyrazine, indole, Ph, naphthalene, quinoline or thiazole groups; R3 = O-(C1-4-alkyl), (un)substituted Ph (substituted with halogen or OMe); R17 = pyridyl, C1-4-alkyl, (un)substituted Ph (substituted with halogen, NO2, OH or OMe)], their bases or addition salts with pharmaceutically acceptable acids, in the form of enantiomers, diastereoisomers, or their mixts. (including racemic mixts.). The method of preparation and its therapeutic application, particularly against cancer, is described. Thus, I (R = 2-pyridyl) was prepared from podophyllotoxin via reaction with pyridine-2-carboxylic acid in CH2Cl2 containing DMAP and 1-[3- (dimethylamino)propyl]-3-ethylcarbodiimide hydrochloride. The cytotoxicity of I (@ 10-100 nM) vs. human tumor cell lines (A549, HT-29, KB, KB-VMH, KB-VP2, MDA-MB-231, SK-N-SH) was tested (no data).

IT 608524-41-0P 608524-44-3P 608524-45-4P
608524-46-5P 608524-47-6P 608524-48-7P
608524-49-8P 608524-50-1P 608524-51-2P
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608524-55-6P 608524-56-7P 608524-57-8P
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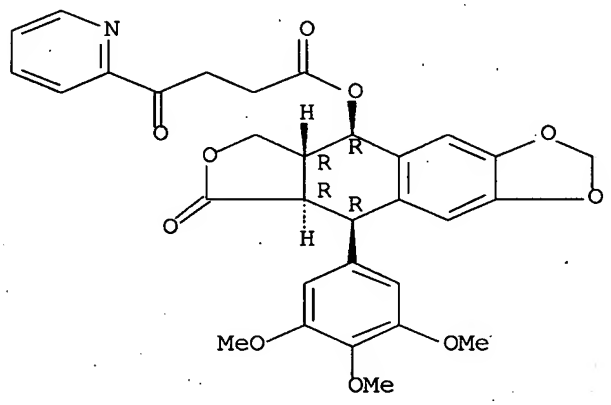
608525-03-7P 609356-55-0P 609356-69-6P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of new podophyllotoxin derivs. as antitumor therapeutics)

RN 608524-41-0 CAPLUS

CN 2-Pyridinebutanoic acid, γ-oxo-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

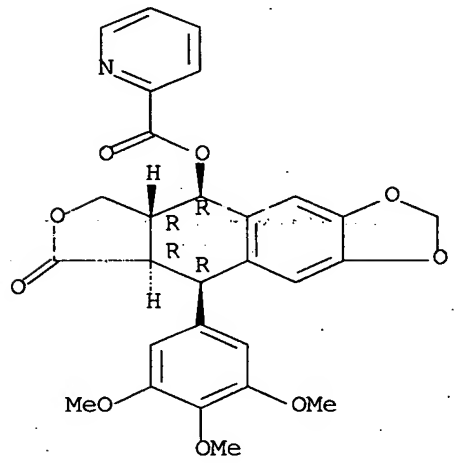
Absolute stereochemistry.



RN 608524-44-3 CAPLUS

CN 2-Pyridinecarboxylic acid, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



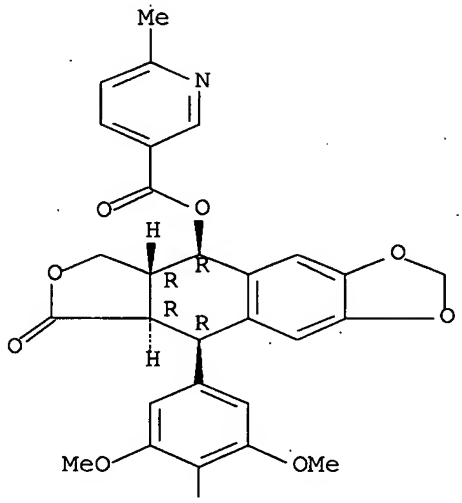
RN 608524-45-4 CAPLUS

CN 3-Pyridinecarboxylic acid, 6-methyl-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-

hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

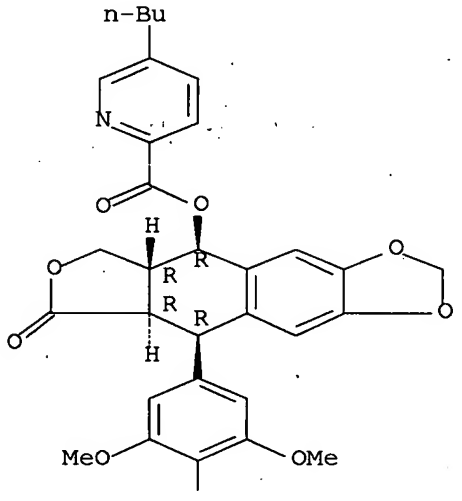


PAGE 2-A

RN 608524-46-5 CAPLUS
CN 2-Pyridinecarboxylic acid, 5-butyl-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

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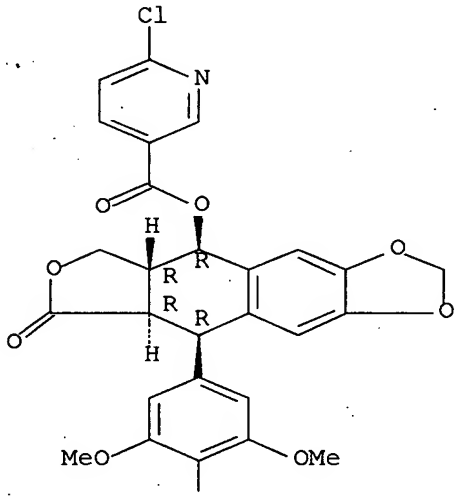
RN 608524-47-6 CAPLUS
CN 3-Pyridinecarboxylic acid, 6-chloro-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

PAGE 1-A

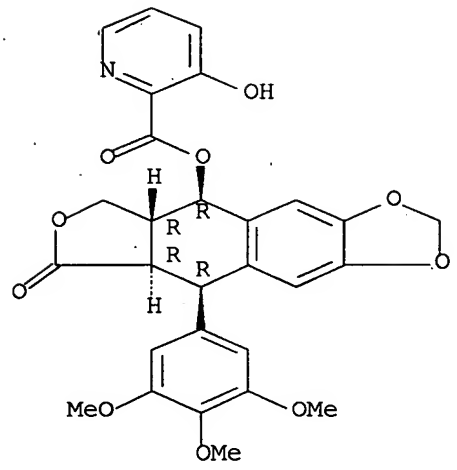


PAGE 2-A

OMe

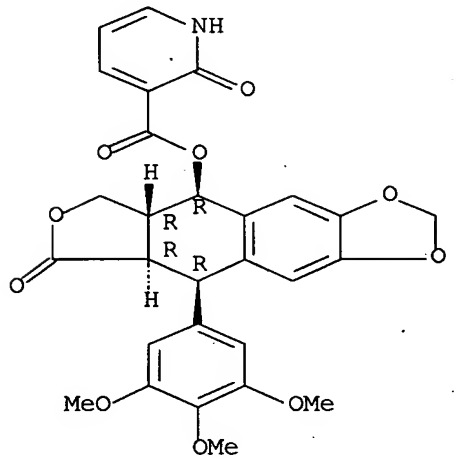
RN 608524-48-7 CAPLUS
CN 2-Pyridinecarboxylic acid, 3-hydroxy-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



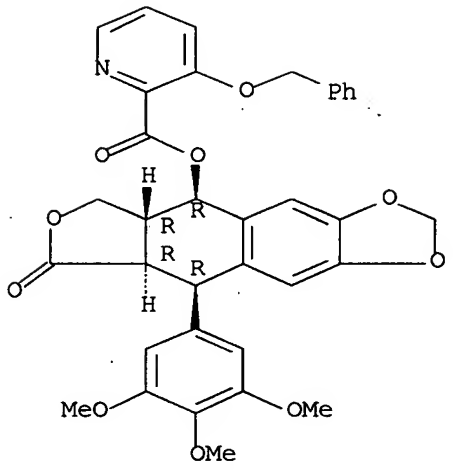
RN 608524-49-8 CAPLUS
CN 3-Pyridinecarboxylic acid, 1,2-dihydro-2-oxo-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



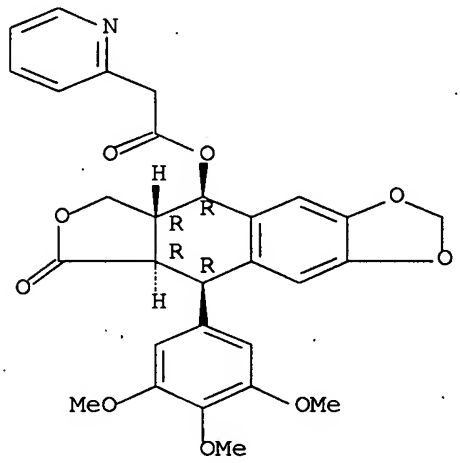
RN 608524-50-1 CAPLUS
CN 2-Pyridinecarboxylic acid, 3-(phenylmethoxy)-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



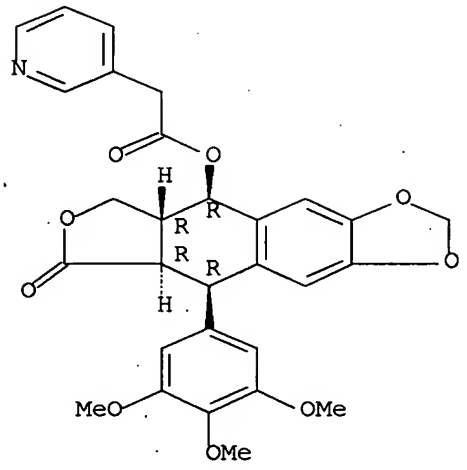
RN 608524-51-2 CAPLUS
CN 2-Pyridineacetic acid, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



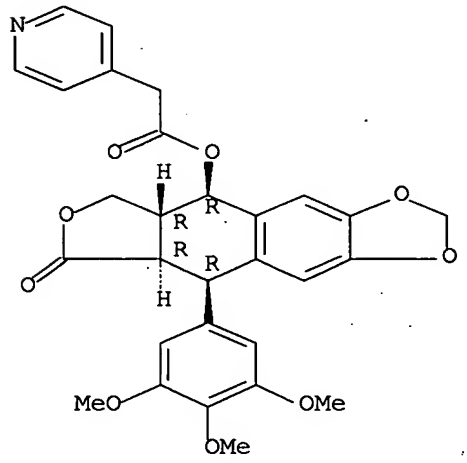
RN 608524-52-3 CAPLUS
CN 3-Pyridineacetic acid, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



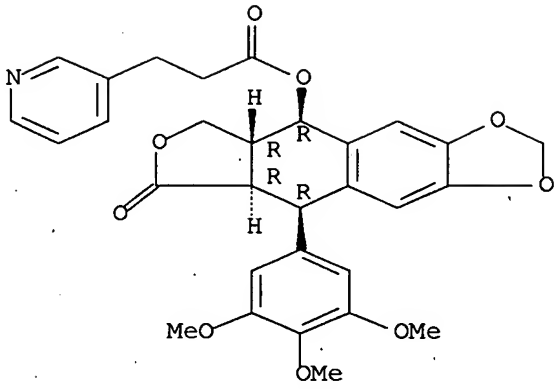
RN 608524-53-4 CAPLUS
CN 4-Pyridineacetic acid, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



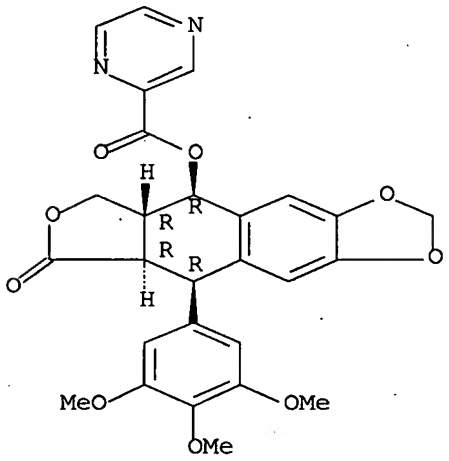
RN 608524-54-5 CAPLUS
CN 3-Pyridinepropanoic acid, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



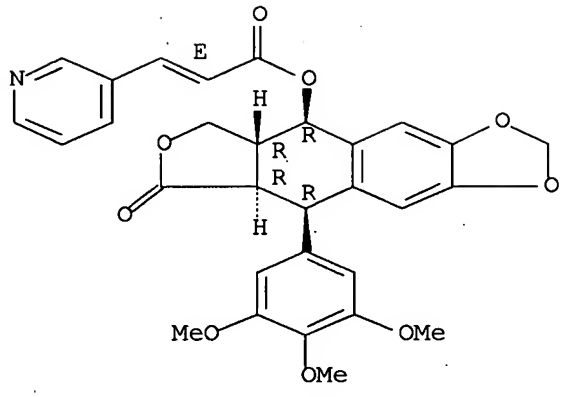
RN 608524-55-6 CAPLUS
CN Pyrazinecarboxylic acid, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



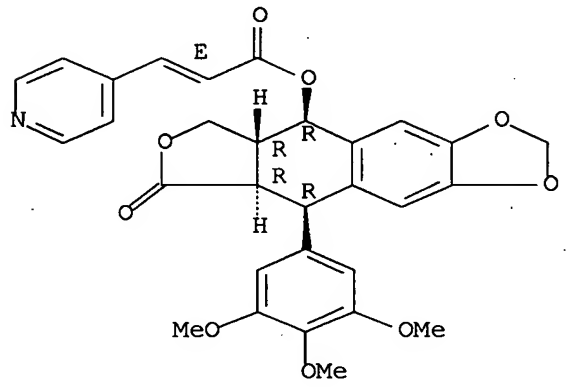
RN 608524-56-7 CAPLUS
CN 2-Propenoic acid, 3-(3-pyridinyl)-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester, (2E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



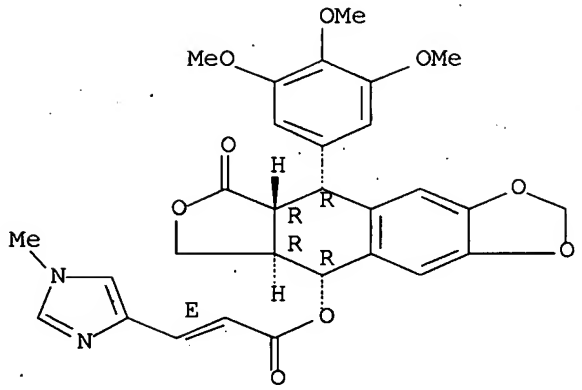
RN 608524-57-8 CAPLUS
CN 2-Propenoic acid, 3-(4-pyridinyl)-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester, (2E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



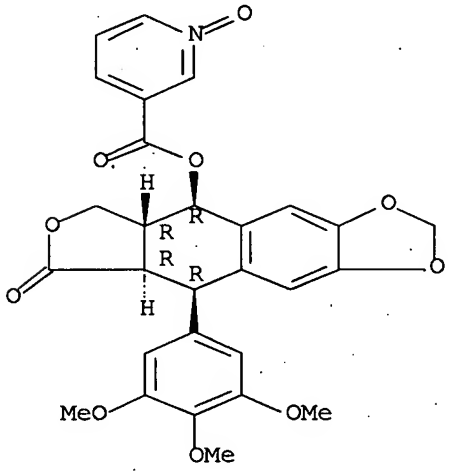
RN 608524-58-9 CAPLUS
CN 2-Propenoic acid, 3-(1-methyl-1H-imidazol-4-yl)-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester, (2E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



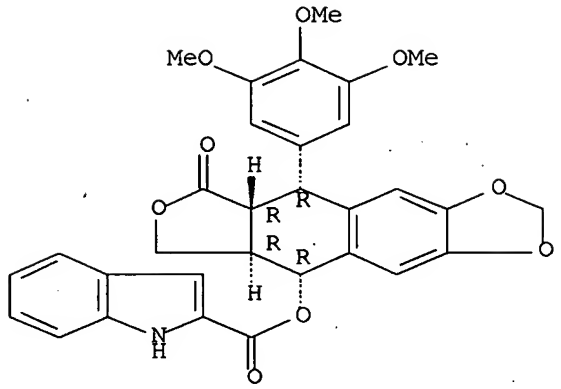
RN 608524-59-0 CAPLUS
CN 3-Pyridinecarboxylic acid, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester, 1-oxide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



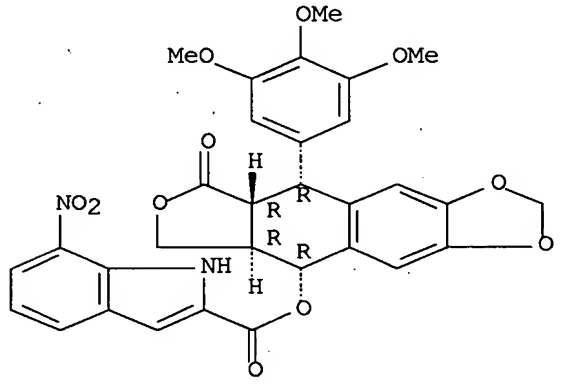
RN 608524-60-3 CAPLUS
CN 1H-Indole-2-carboxylic acid, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



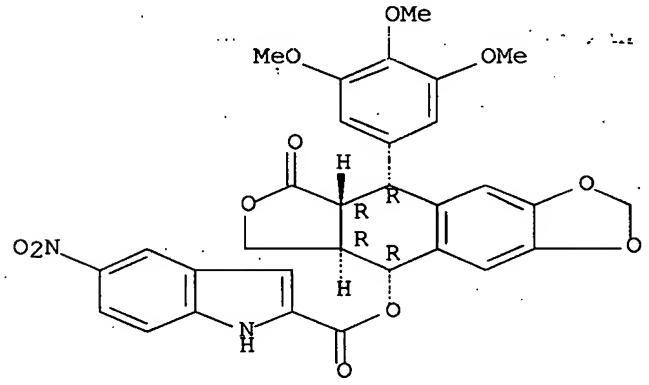
RN 608524-61-4 CAPLUS
CN 1H-Indole-2-carboxylic acid, 7-nitro-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



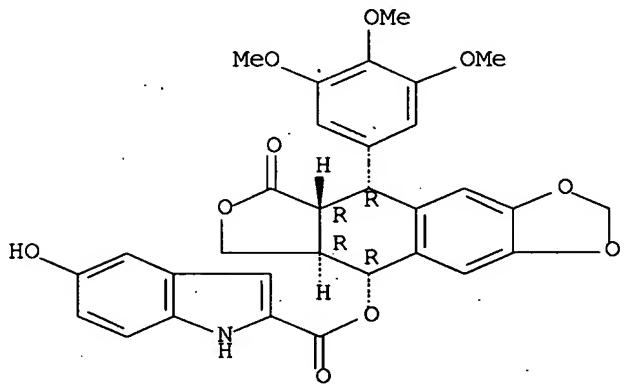
RN 608524-62-5 CAPLUS
CN 1H-Indole-2-carboxylic acid, 5-nitro-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



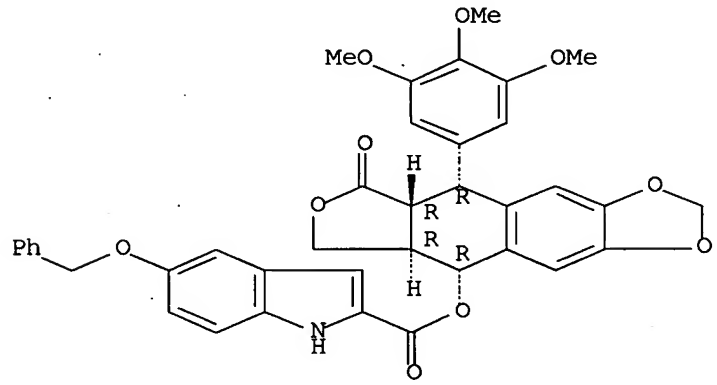
RN 608524-63-6 CAPLUS
CN 1H-Indole-2-carboxylic acid, 5-hydroxy-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



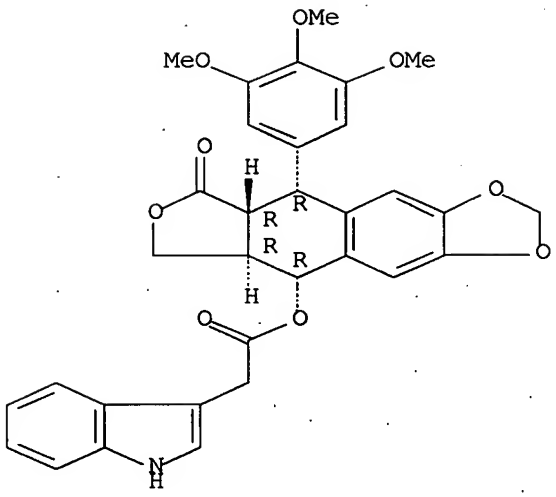
RN 608524-64-7 CAPLUS
CN 1H-Indole-2-carboxylic acid, 5-(phenylmethoxy)-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



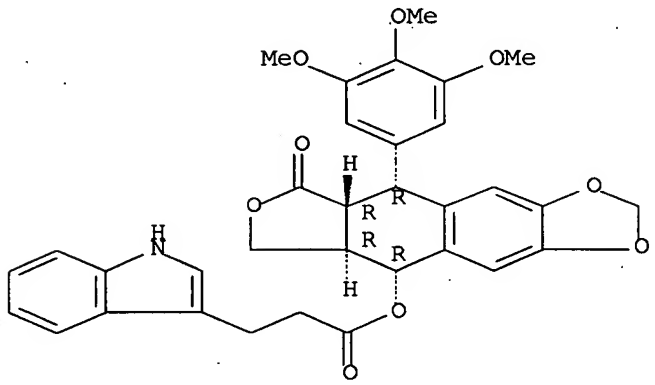
RN 608524-65-8 CAPLUS
CN 1H-Indole-3-acetic acid, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



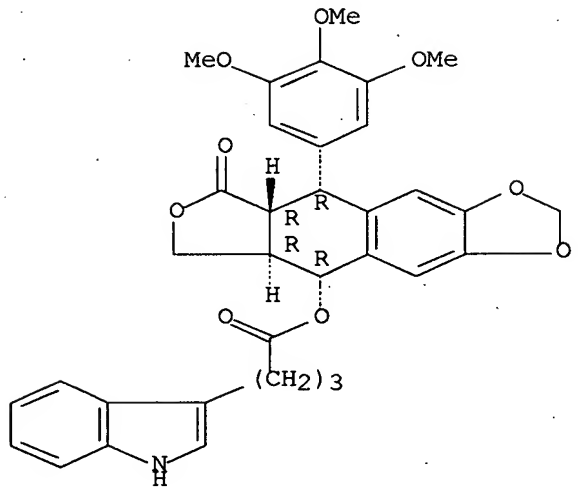
RN 608524-66-9 CAPLUS
CN 1H-Indole-3-propanoic acid, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



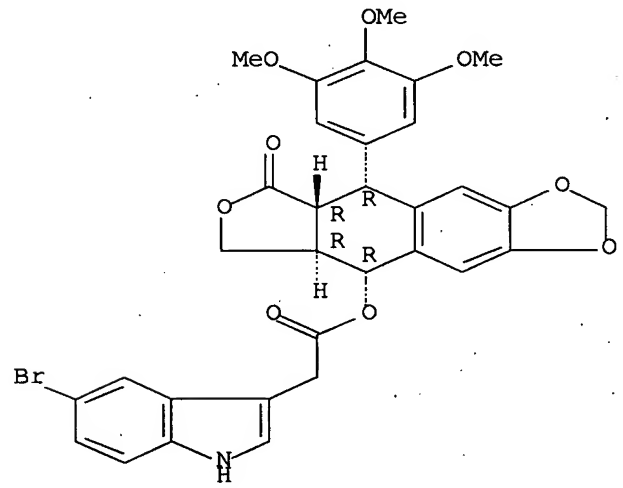
RN 608524-67-0 CAPLUS
CN 1H-Indole-3-butanoic acid, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 608524-68-1 CAPLUS
CN 1H-Indole-3-acetic acid, 5-bromo-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 608524-69-2 CAPLUS
CN 1H-Indole-3-acetic acid, 1-methyl-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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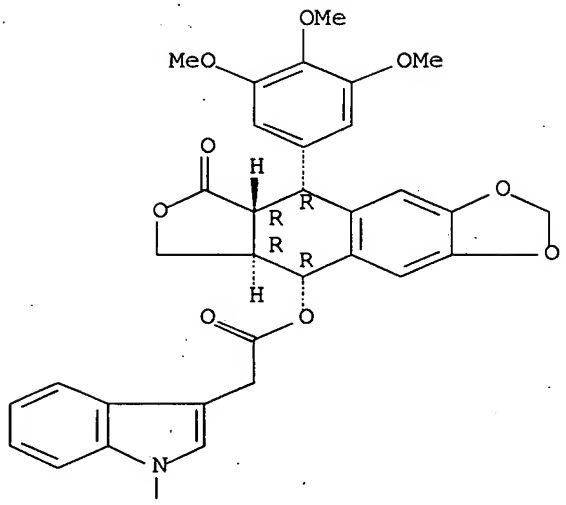

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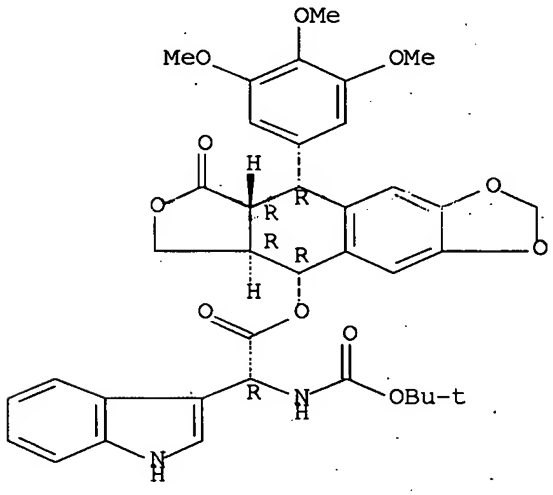
RN 608524-70-5 CAPLUS

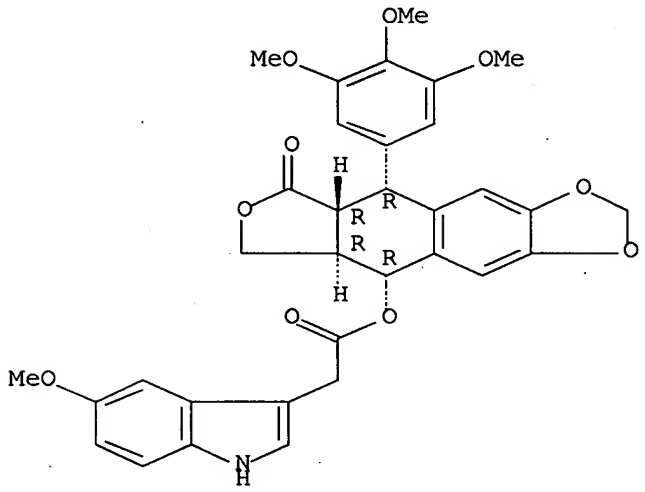
CN 1H-Indole-3-acetic acid, α-[[(1,1-dimethylethoxy)carbonyl]amino]-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester, (αR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



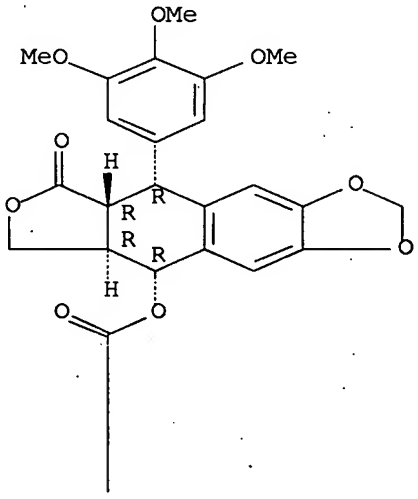
RN 608524-71-6 CAPLUS
CN 1H-Indole-3-acetic acid, 5-methoxy-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 608524-89-6 CAPLUS
CN 6-Quinolinecarboxylic acid, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



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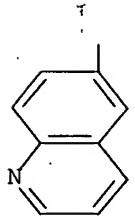
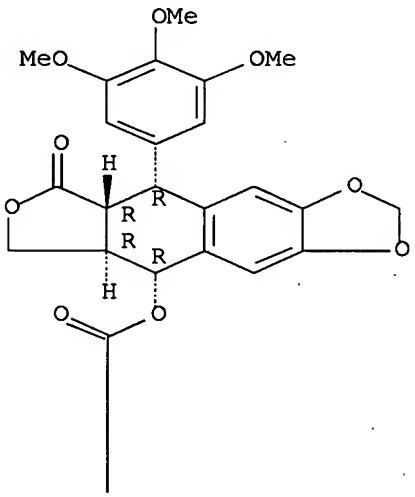


RN 608524-90-9 CAPLUS
CN 2-Quinolinecarboxylic acid, 4-hydroxy-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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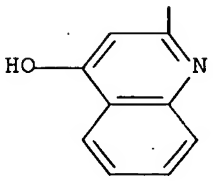
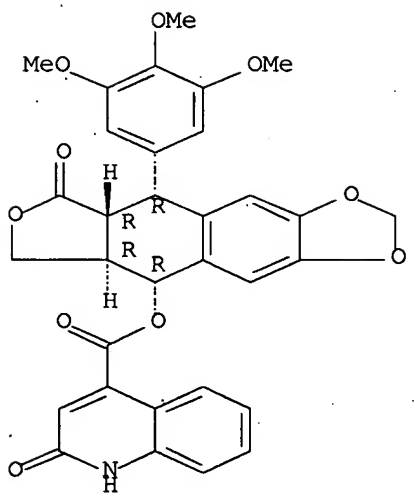


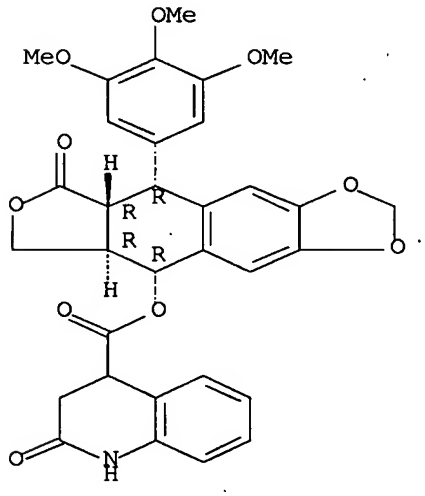
RN 608524-91-0 CAPLUS
CN 4-Quinolinecarboxylic acid, 1,2-dihydro-2-oxo-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



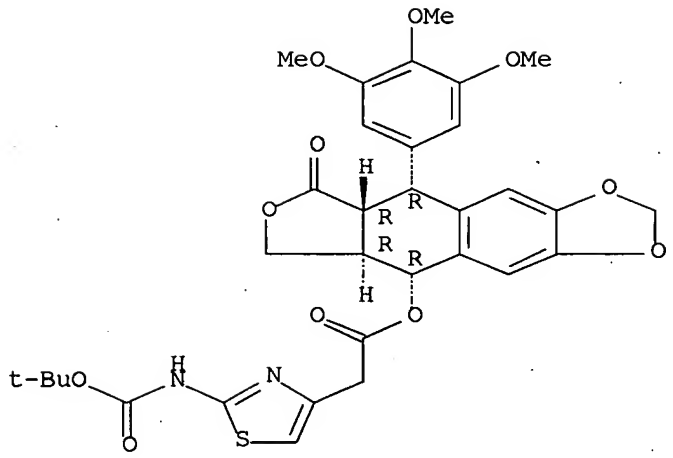
RN 608524-93-2 CAPLUS
CN 4-Quinolinecarboxylic acid, 1,2,3,4-tetrahydro-2-oxo-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



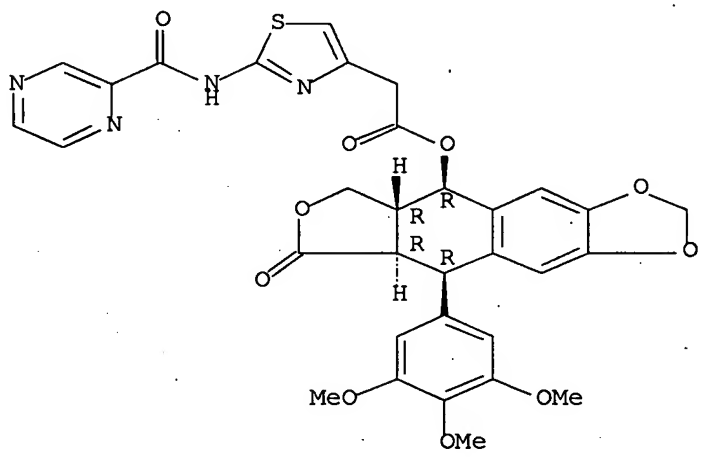
RN 608524-96-5 CAPLUS
CN 4-Thiazoleacetic acid, 2-[[(1,1-dimethylethoxy)carbonyl]amino]-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



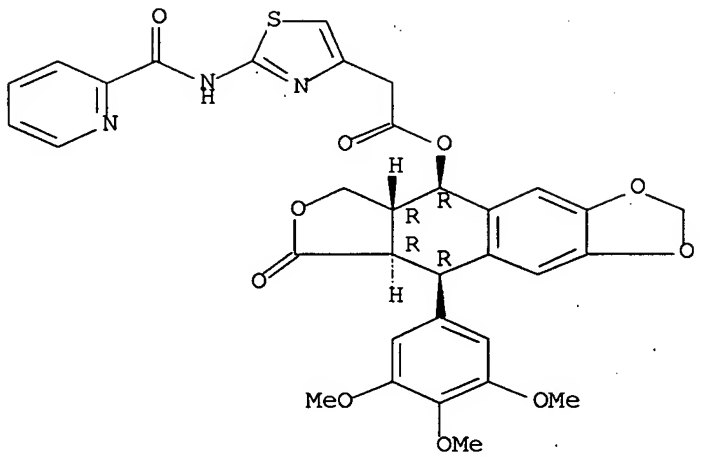
RN 608524-98-7 CAPLUS
CN 4-Thiazoleacetic acid, 2-[(pyrazinylcarbonyl)amino]-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 608525-01-5 CAPLUS
CN 4-Thiazoleacetic acid, 2-[(2-pyridinylcarbonyl)amino]-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 608525-03-7 CAPLUS
CN 4-Thiazoleacetic acid, 2-[(1H-indol-3-ylacetyl)amino]-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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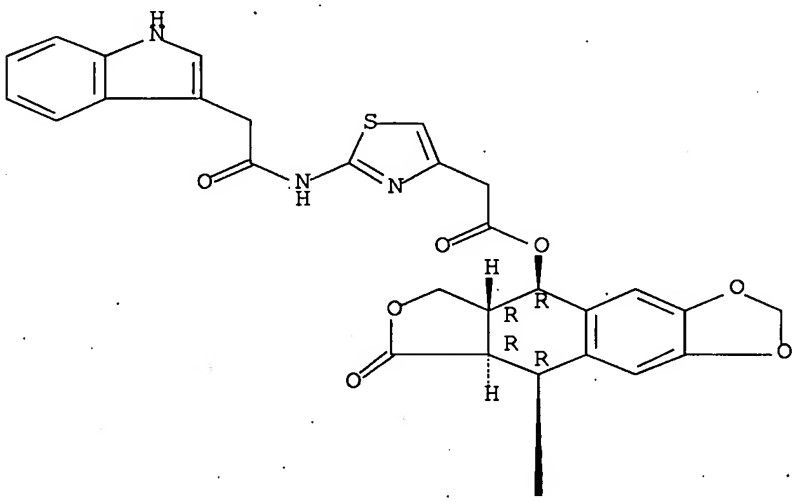

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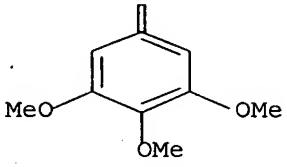

RN 609356-55-0 CAPLUS

CN 2-Quinolinecarboxylic acid, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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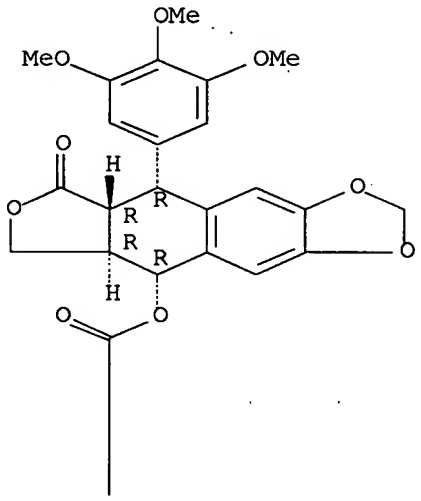

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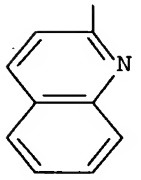
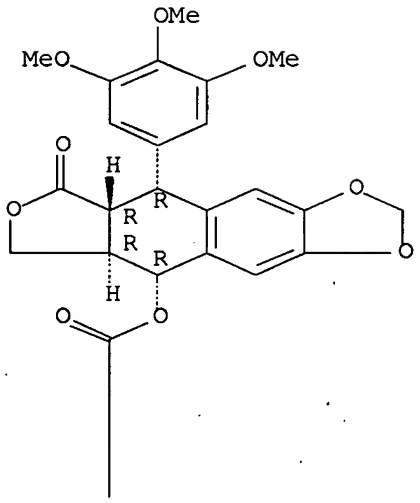
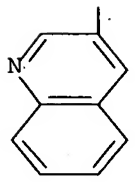


RN 609356-69-6 CAPLUS

CN 3-Quinolinecarboxylic acid, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.





L9 ANSWER 6 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:351544 CAPLUS Full-text
DOCUMENT NUMBER: 133:9081
TITLE: Modified and truncated penetratin derivatives as membrane translocation carriers for drug transport
INVENTOR(S): Fischer, M. Peter; Zhelev, Nikolai
PATENT ASSIGNEE(S): Cyclacel Limited, UK
SOURCE: PCT Int. Appl., 59 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000029427	A2	20000525	WO 1999-GB3750	19991111
WO 2000029427	A3	20001005		

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RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,

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PRIORITY APPLN. INFO.:	GB 1998-25000	A 19981113
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	GB 1999-2522	A 19990204
	GB 1999-2525	A 19990204
	GB 1999-14578	A 19990622
	WO 1999-GB3750	W 19991111
	US 1999-438460	A3 19991112

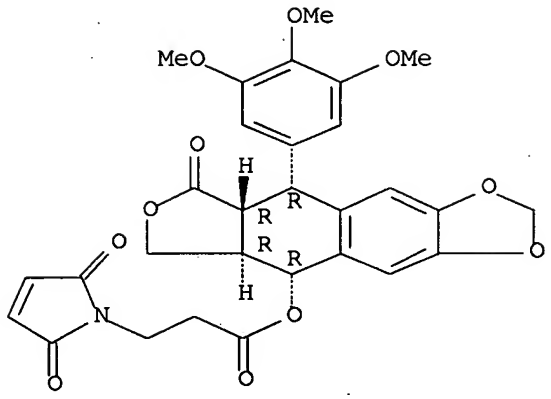
AB The invention relates to modified and truncated forms of the membrane transport vector penetratin, a peptide comprising residues 45-58 of the Antennapedia homeodomain protein. Such truncated forms include 7-mer peptides that may in themselves include further variation. Such smaller or truncated forms of penetratin are advantageous in that they are more acceptable to the pharmaceutical industry as delivery carrier moieties, by virtue of the carrier-cargo conjugate having an advantageous immunogenicity, solubility, and clearance, and in some cases advantageous efficacy as compared to using a conjugate comprised of full length penetratin. Carrier moieties are synthetically linked to a cargo moiety selected from p21WAF-derived peptides, p16-derived peptides or the drugs roscovitine, taxol, or a podophyllotoxin. The truncated penetratin-podophyllotoxin conjugate, for example, is more effective in terms of anti-proliferative activity on tumor cells while exhibiting lower generalized toxicity.

IT 254893-96-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(modified and truncated penetratin derivs. as membrane translocation carriers for drug transport)

RN 254893-96-4 CAPLUS

CN 1H-Pyrrole-1-propanoic acid, 2,5-dihydro-2,5-dioxo-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

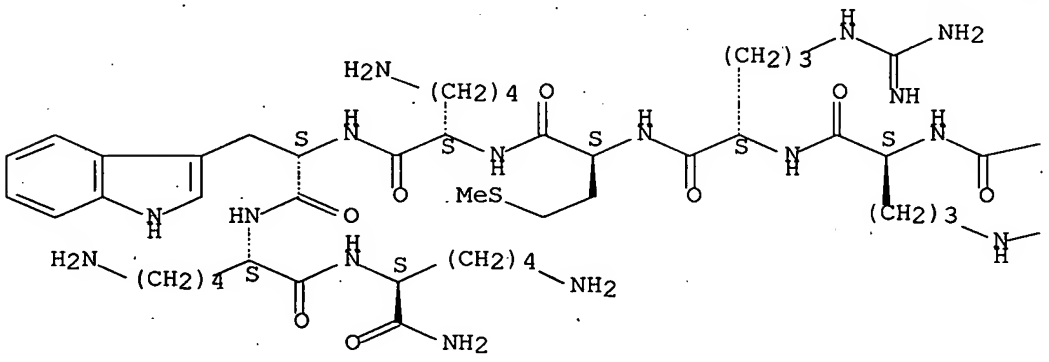


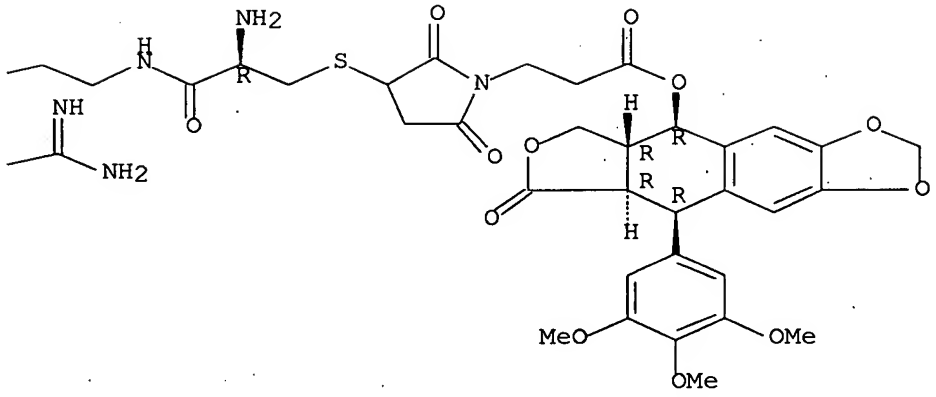
IT 254894-03-6P 254894-06-9P 254894-57-0P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(modified and truncated penetratin derivs. as membrane translocation carriers for drug transport)

RN 254894-03-6 CAPLUS

CN L-Lysinamide, S-[1-[3-[[(5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]oxy]-3-oxopropyl]-2,5-dioxo-3-pyrrolidinyl]-L-cysteinyl-β-alanyl-L-arginyl-L-arginyl-L-methionyl-L-lysyl-L-tryptophyl-L-lysyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

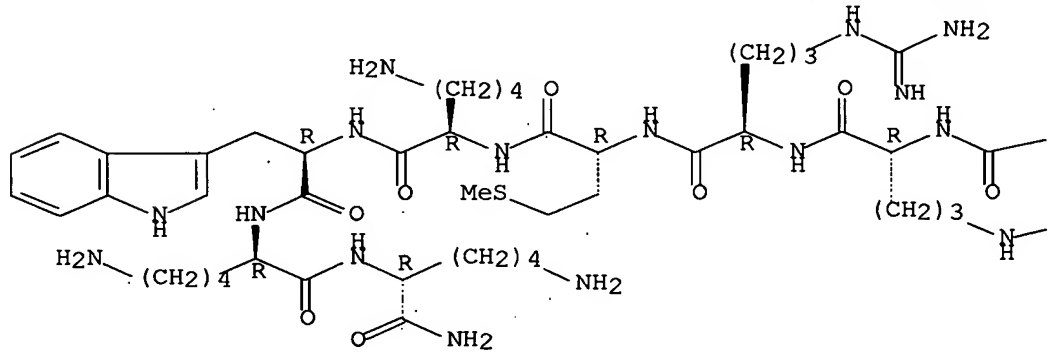


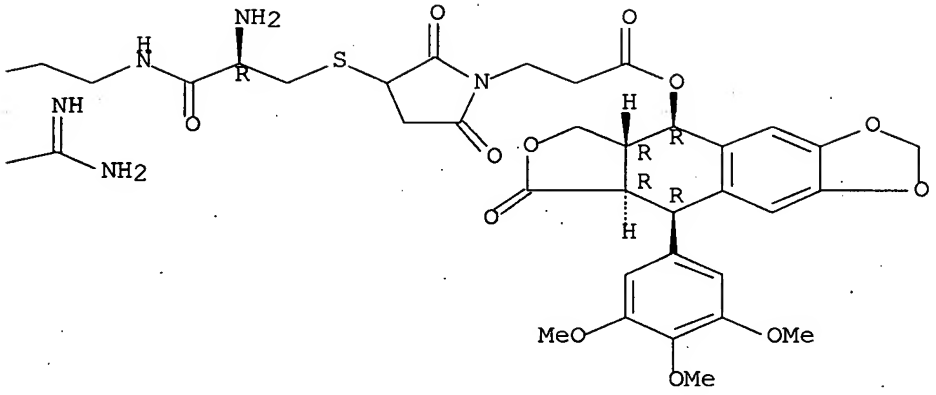


RN 254894-06-9 CAPLUS

CN D-Lysinamide, S-[1-[3-[[(5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]oxy]-3-oxopropyl]-2,5-dioxo-3-pyrrolidinyl]-L-cysteinyl-β-alanyl-D-arginyl-D-arginyl-D-methionyl-D-lysyl-D-tryptophyl-D-lysyl- (9CI) (CA INDEX NAME)

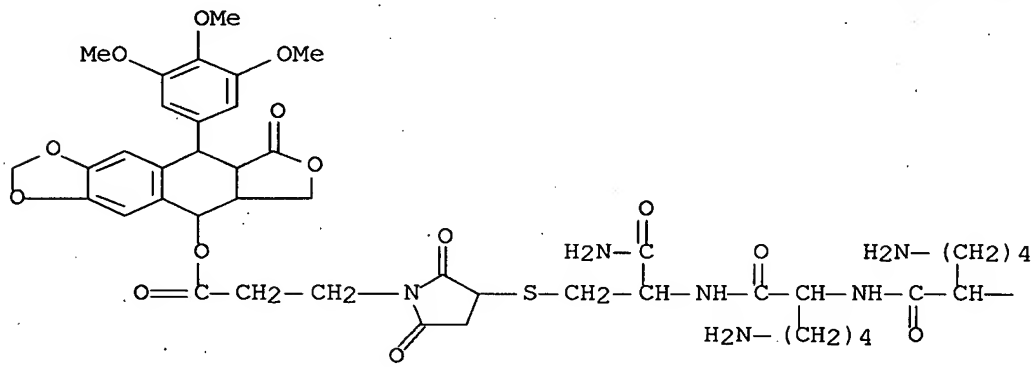
Absolute stereochemistry.

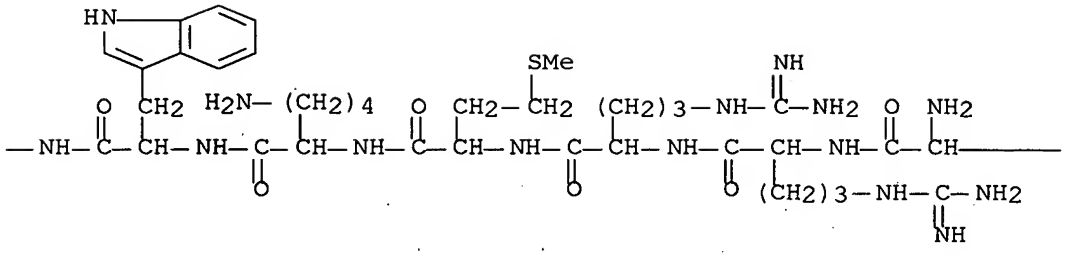


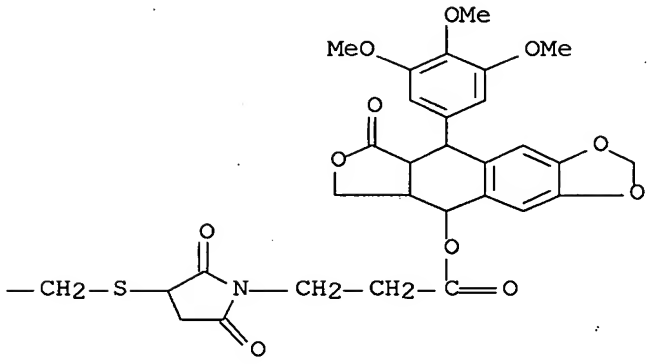


RN 254894-57-0 CAPLUS

CN L-Cysteinamide, S-[1-[3-[[(5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]oxy]-3-oxopropyl]-2,5-dioxo-3-pyrrolidinyl]-L-cysteinyl-L-arginyl-L-arginyl-L-methionyl-L-lysyl-L-tryptophyl-L-lysyl-L-lysyl-S-[1-[3-[[(5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]oxy]-3-oxopropyl]-2,5-dioxo-3-pyrrolidinyl]-(9CI) (CA INDEX NAME)







L9 ANSWER 7 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:34769 CAPLUS Full-text
DOCUMENT NUMBER: 132:93654
TITLE: Preparation of peptide derivatives for improved delivery of drug therapeutic agents
INVENTOR(S): Fischer, Peter Martin; Wang, Shudong
PATENT ASSIGNEE(S): Cyclacel Limited, UK
SOURCE: PCT Int. Appl., 115 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000001417	A1	20000113	WO 1999-GB1957	19990622

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RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

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AU 756014	B2	20030102		
GB 2340121	A	20000216	GB 1999-14577	19990622
GB 2340121	B	20000906		
EP 1093383	A1	20010425	EP 1999-928071	19990622
EP 1093383	B1	20041013		
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AT 279210	T	20041015	AT 1999-928071	19990622
ES 2230860	T3	20050501	ES 1999-928071	19990622
US 6472507	B1	20021029	US 1999-346847	19990702
US 2003119735	A1	20030626	US 2002-210660	20020731
US 6992169	B2	20060131		

PRIORITY APPLN. INFO.:	GB 1998-14527	A 19980703
	WO 1999-GB1957	W 19990622
	US 1999-346847	A1 19990702

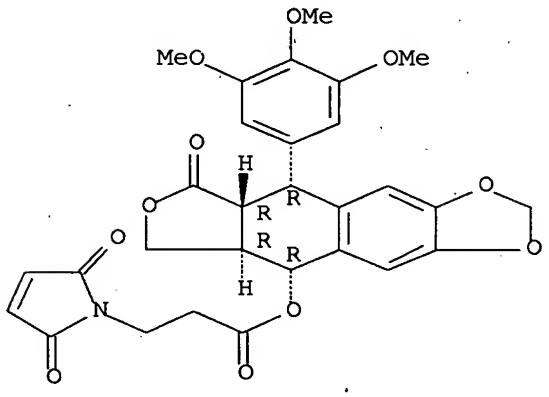
AB The present invention relates to a novel drug delivery system for use in the improved delivery of drug therapeutic agents into target cells. The system comprises a drug moiety linked to a carrier moiety wherein the carrier moiety comprises a homeobox peptide or its fragment or derivative Thus, {[4-[N-(2,4-diamino-6-pteridinylmethyl)-N-methylamino]benzoyl]-Glu- Gly-β-Ala}4-Lys2-Lys-β-Ala-Arg-Gln-Ile-Lys-Ile-Trp-Phe-Gln-Asn- Arg-Arg-Met-Lys-Trp-Lys-Lys-OH was prepared by the solid-phase method and assayed for in vitro cytotoxicity.

IT 254893-96-4P 254893-97-5P 254893-99-7P
254894-00-3P 254894-02-5P 254894-03-6P
254894-06-9P 254894-57-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of peptide derivs. for improved delivery of drug therapeutic agents)

RN 254893-96-4 CAPLUS

CN 1H-Pyrrole-1-propanoic acid, 2,5-dihydro-2,5-dioxo-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

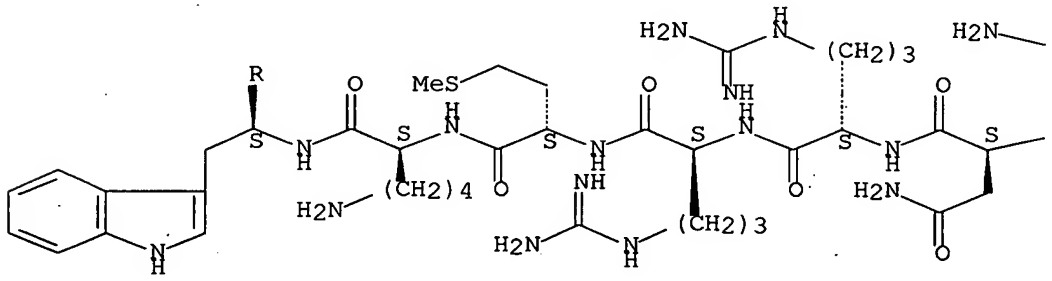


RN 254893-97-5 CAPLUS

CN L-Lysine, S-[1-[3-[[(5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]oxy]-3-oxopropyl]-2,5-dioxo-3-pyrrolidinyl]-L-cysteinyl-L-arginyl-L-glutaminyl-L-isoleucyl-L-lysyl-L-isoleucyl-L-tryptophyl-L-phenylalanyl-L-glutaminyl-L-asparaginyl-L-arginyl-L-arginyl-L-methionyl-L-lysyl-L-tryptophyl-L-lysyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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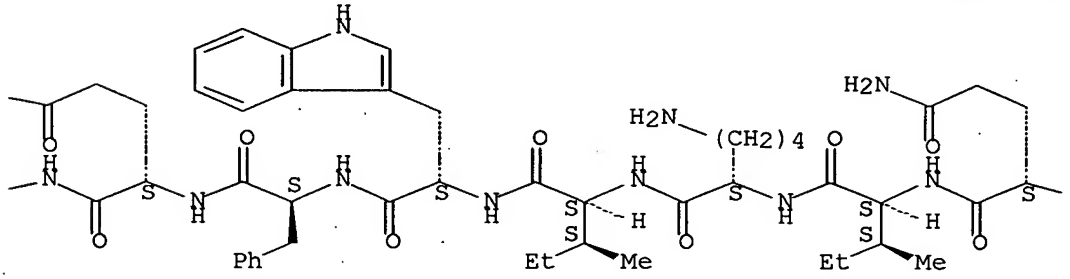

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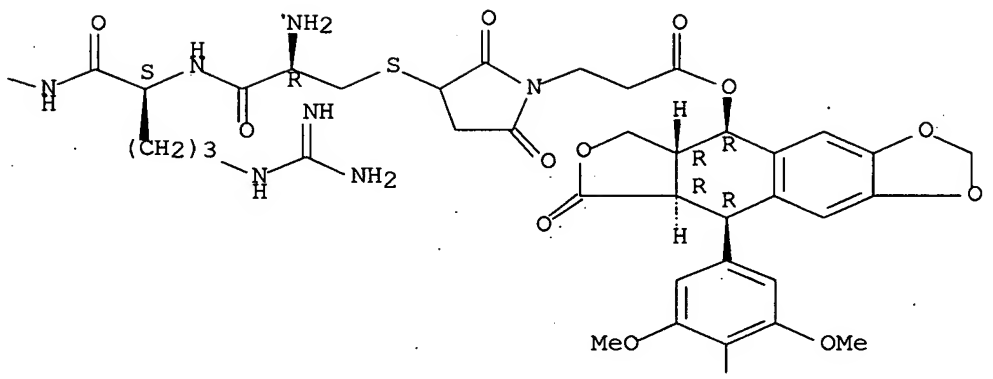

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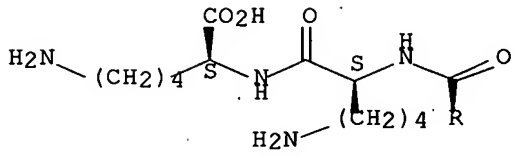


PAGE 2-C

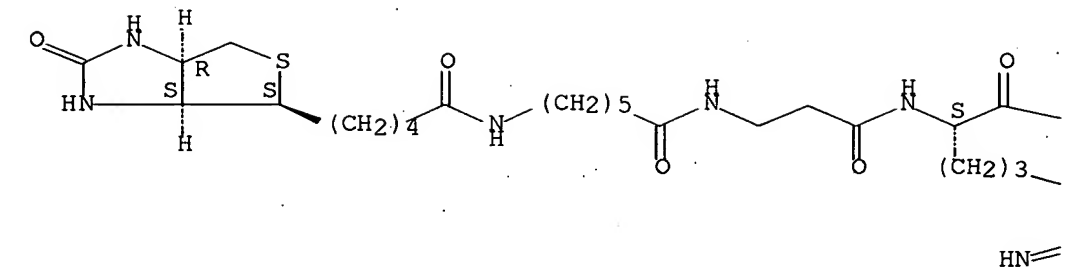
OMe

RN 254893-99-7 CAPLUS

CN Glycinamide, N-[6-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-1-oxohexyl]-β-alanyl-L-arginyl-L-glutaminyl-L-isoleucyl-L-lysyl-L-isoleucyl-L-tryptophyl-L-phenylalanyl-L-glutaminyl-L-asparaginyl-L-arginyl-L-arginyl-L-methionyl-L-lysyl-L-tryptophyl-L-lysyl-L-lysylglycyl-S-[1-[3-[[(5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]oxy]-3-oxopropyl]-2,5-dioxo-3-pyrrolidinyl]-L-cysteinyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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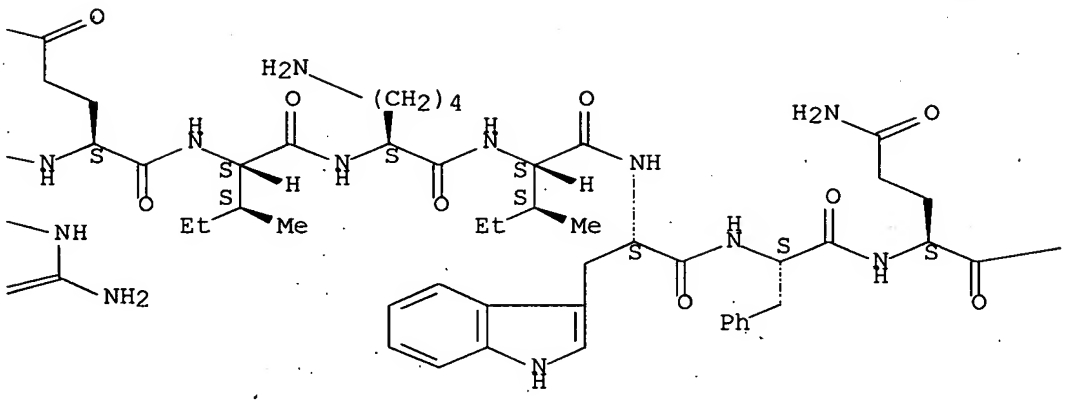

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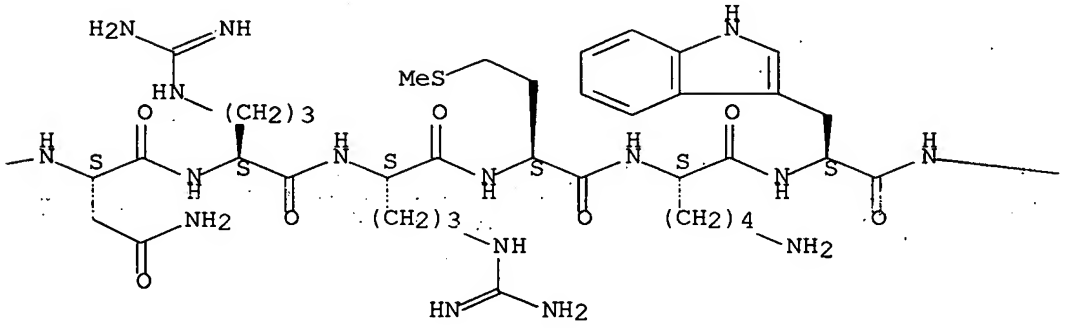

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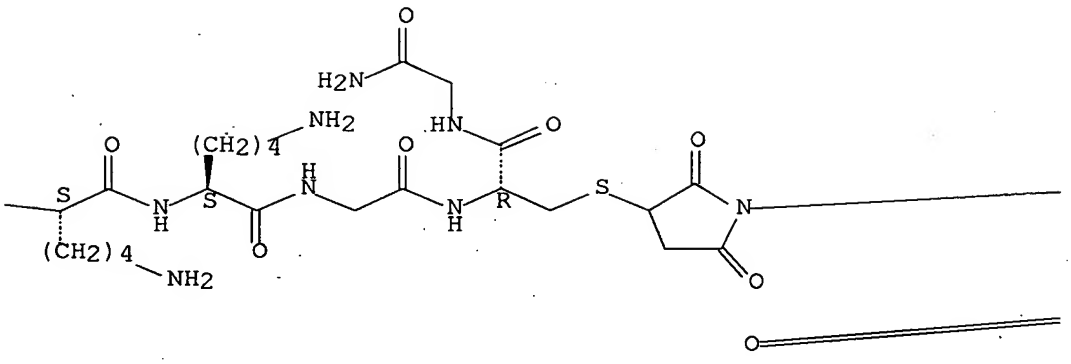

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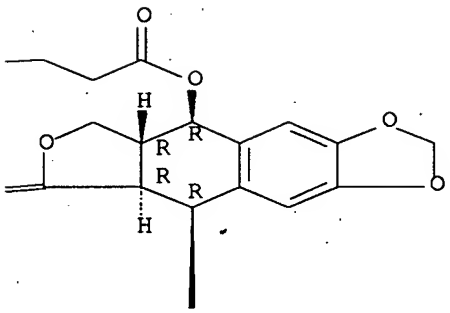

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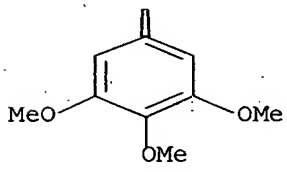

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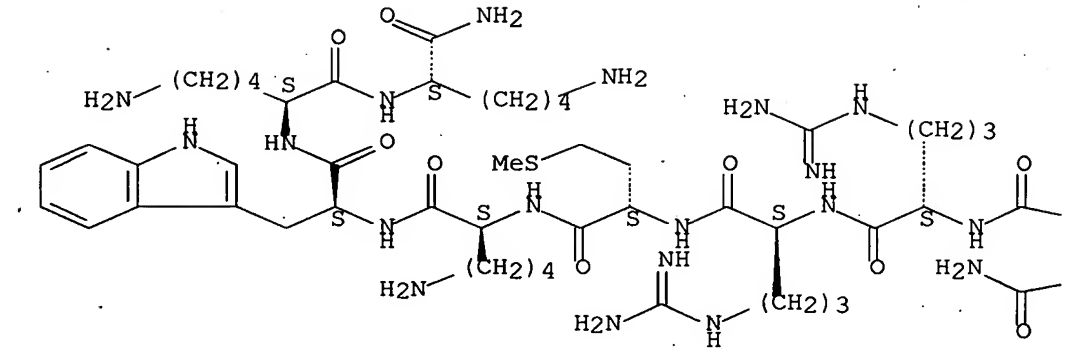
Absolute stereochemistry.

PAGE 1-A



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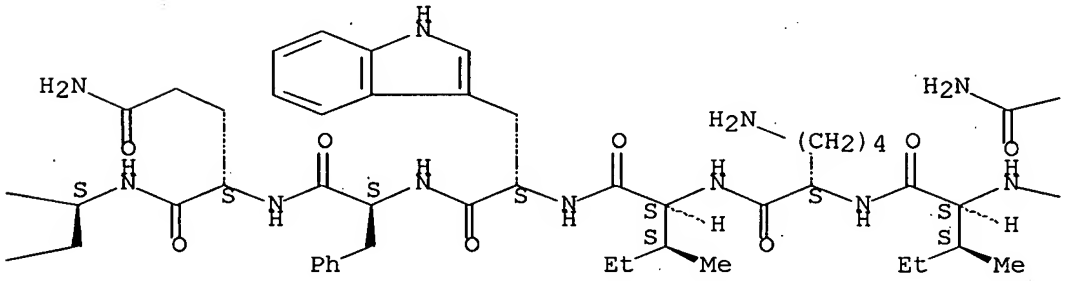

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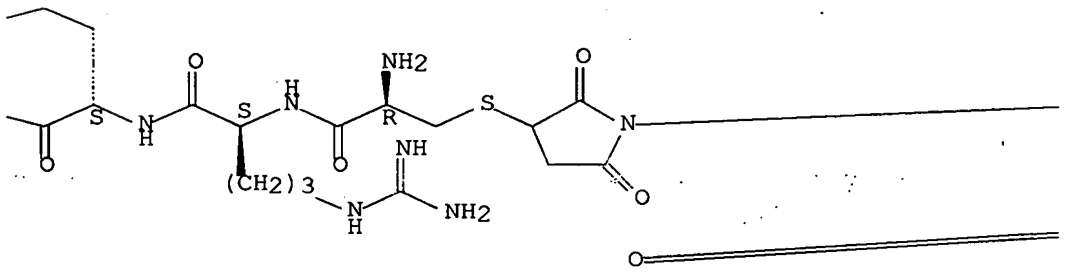

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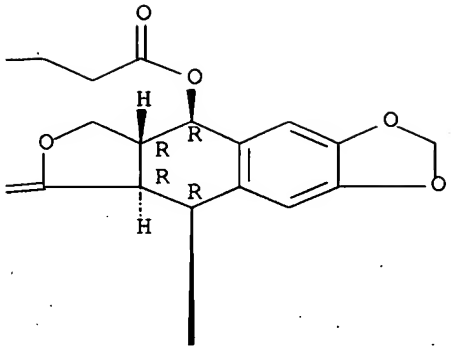

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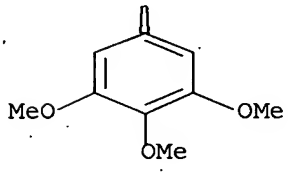

RN 254894-02-5 CAPLUS

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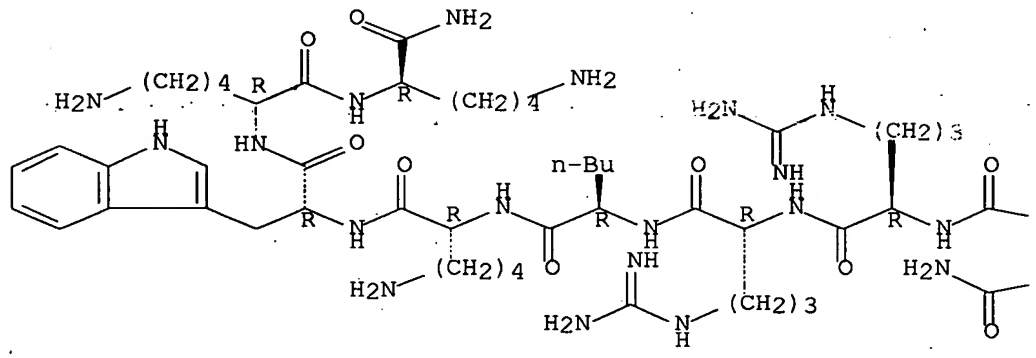
Absolute stereochemistry.

PAGE 1-A



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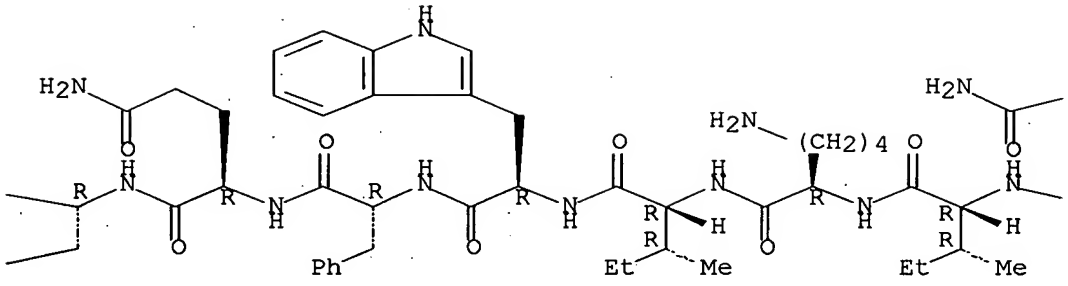

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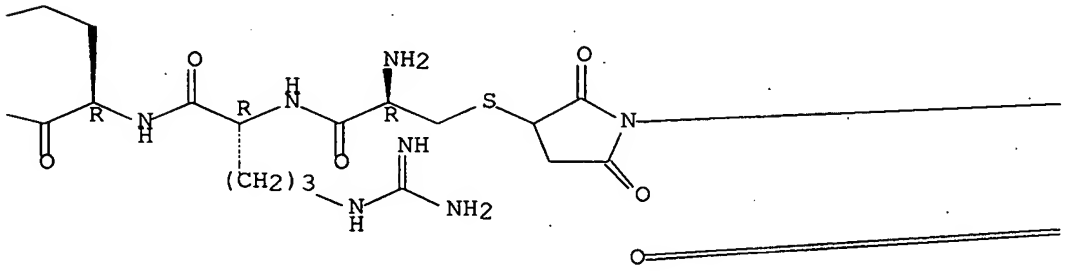

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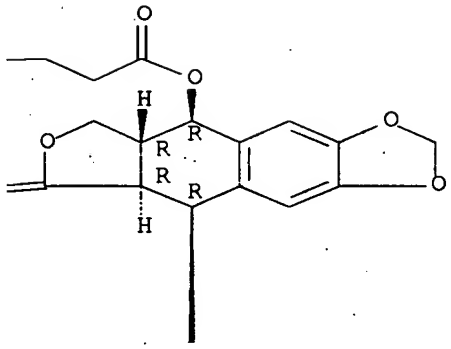
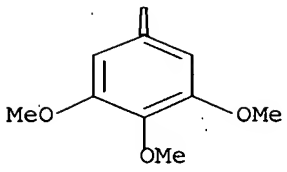
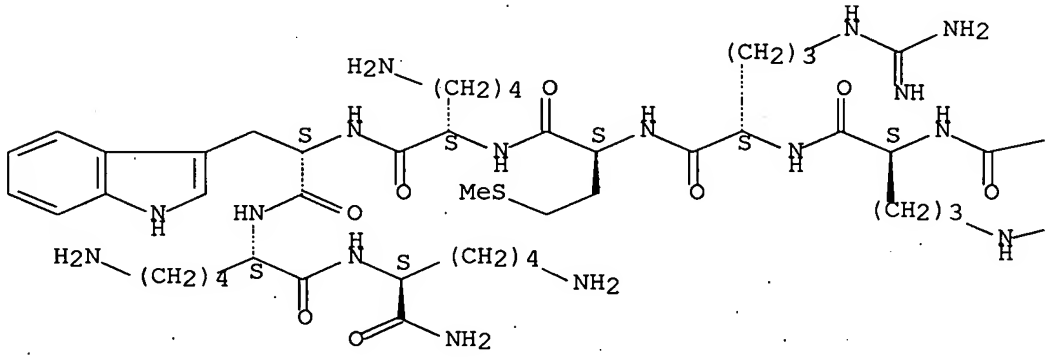
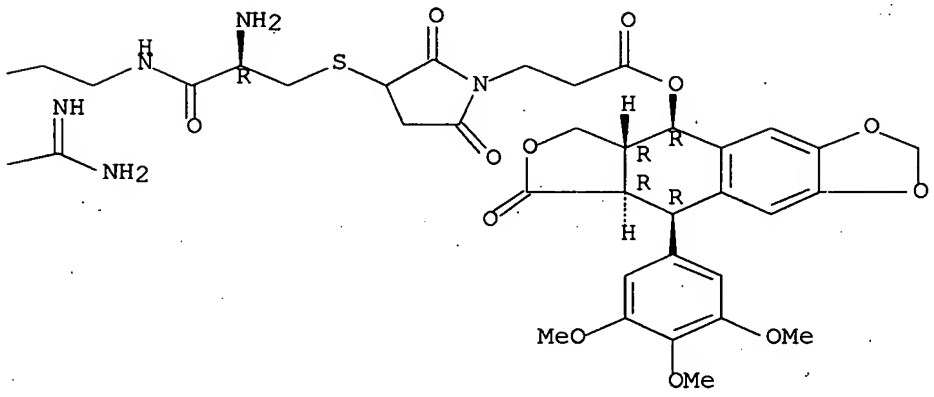




RN 254894-03-6 CAPLUS
CN L-Lysinamide, S-[1-[3-[[(5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]oxy]-3-oxopropyl]-2,5-dioxo-3-pyrrolidinyl]-L-cysteinyl-β-alanyl-L-arginyl-L-arginyl-L-methionyl-L-lysyl-L-tryptophyl-L-lysyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



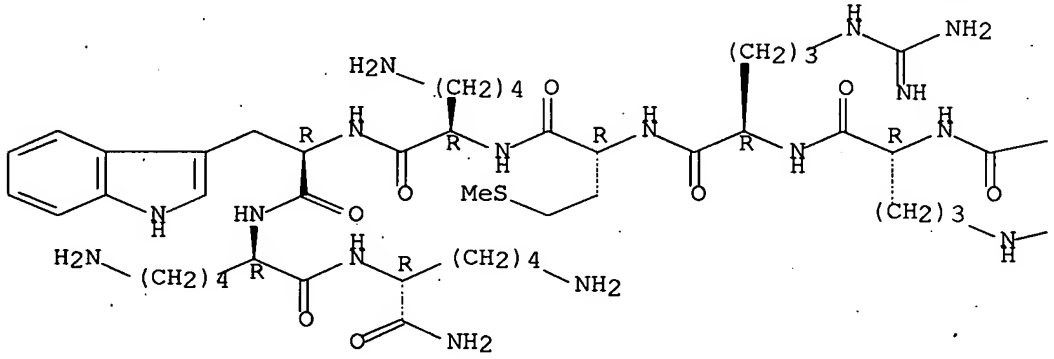


RN 254894-06-9 CAPLUS
CN D-Lysinamide, S-[1-[3-[[(5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]oxy]-

3-oxopropyl]-2,5-dioxo-3-pyrrolidinyl]-L-cysteinyl-β-alanyl-D-arginyl-D-arginyl-D-methionyl-D-lysyl-D-tryptophyl-D-lysyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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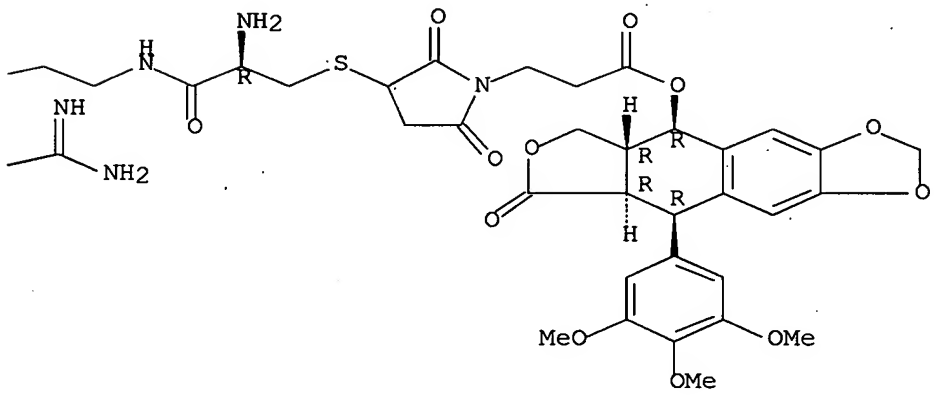
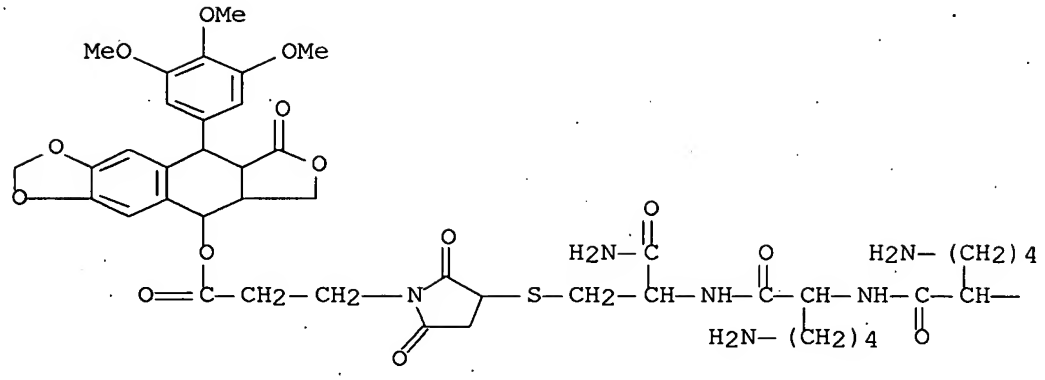


RN 254894-57-0 CAPLUS

CN L-Cysteinamide, S-[1-[3-[[(5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]oxy]-3-oxopropyl]-2,5-dioxo-3-pyrrolidinyl]-L-cysteinyl-L-arginyl-L-arginyl-L-methionyl-L-lysyl-L-tryptophyl-L-lysyl-L-lysyl-S-[1-[3-[[(5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]oxy]-3-oxopropyl]-2,5-dioxo-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



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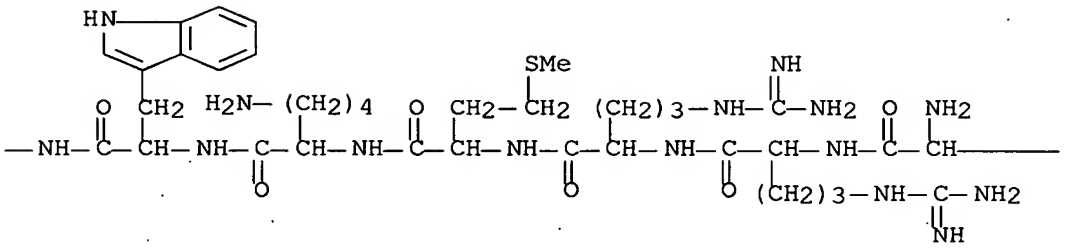

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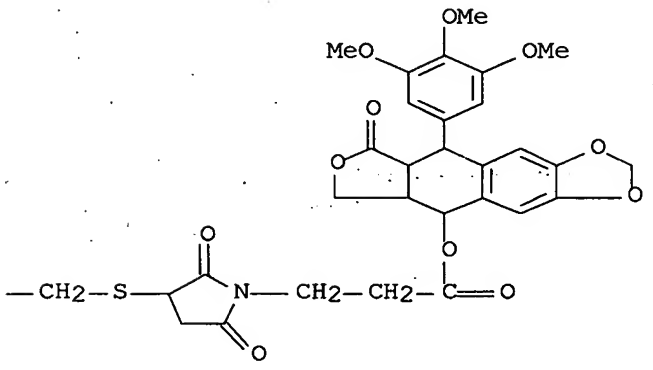


REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 8 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1999:568594 CAPLUS Full-text

DOCUMENT NUMBER: 132:15517

TITLE: Drug delivery of anticancer agents: water soluble 4-polyethylene glycol derivatives of the lignan, podophyllotoxin

AUTHOR(S): Greenwald, R. B.; Conover, C. D.; Pendri, A.; Choe, Y. H.; Martinez, A.; Wu, D.; Guan, S.; Yao, Z.; Shum, K. L.

CORPORATE SOURCE: Research and Development, Department of Organic and Medicinal Chemistry, Enzon, Inc., Piscataway, NJ, USA

SOURCE: Journal of Controlled Release (1999), 61(3), 281-294
CODEN: JCREEC; ISSN: 0168-3659

PUBLISHER: Elsevier Science Ireland Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

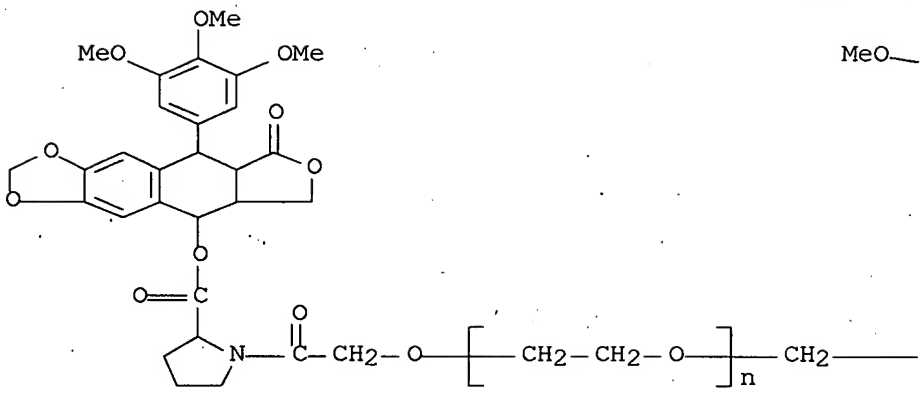
AB This paper reports on the synthesis and in vivo oncolytic activity of a series of water-soluble acyl derivs. of polyethylene glycol (PEG) conjugated podophyllotoxin. Some analogs of the polymer conjugate showed significantly better activity in a murine leukemia model than native podophyllotoxin suspended in an intralipid emulsion. Addnl., when tested i.v. against a solid lung tumor (A549) model, some conjugated analogs were equivalent to the podophyllotoxin/intralipid emulsion, while those compds. demonstrating slower rates of plasma hydrolysis (in vitro) appeared to cause greater toxicity. There appeared to be an overall correlation between the in vivo antitumor activity of the conjugate and its rate of hydrolysis in vitro, with those showing faster release possessing greater antitumor activity. In conclusion, the solubilization and predictable release of podophyllotoxin from a PEG carrier was achieved and resulted in some derivs. demonstrating, at a min., equivalency with podophyllotoxin when administered on an equal molar basis. Further studies may be warranted to assess the PEG-conjugates pharmacokinetics and therapeutic indexes in leukemic models.

IT 251565-08-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation and antitumor activity of water soluble PEG derivs. of podophyllotoxin)

RN 251565-08-9 CAPLUS

CN Poly(oxy-1,2-ethanediyl), α-[2-[(2S)-2-[[[(5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]oxy]carbonyl]-1-pyrrolidinyl]-2-oxoethyl]-ω-[2-[(2S)-2-[[[(5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]oxy]carbonyl]-1-pyrrolidinyl]-2-oxoethoxy]- (9CI) (CA INDEX NAME)

PAGE 1-A



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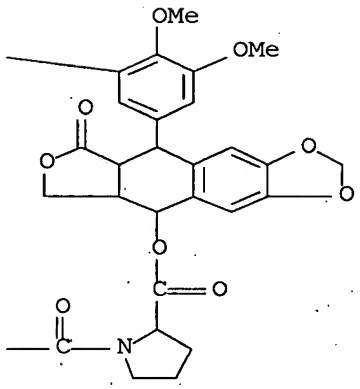
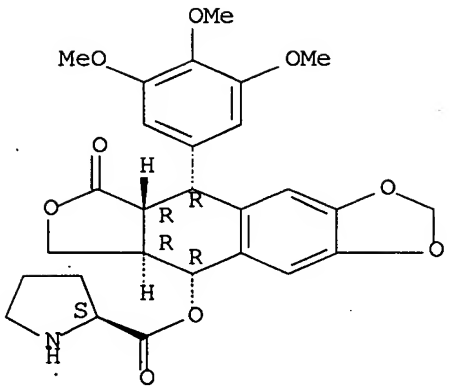


IT 251565-03-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and antitumor activity of water soluble PEG derivs. of podophyllotoxin)

RN 251565-03-4 CAPLUS

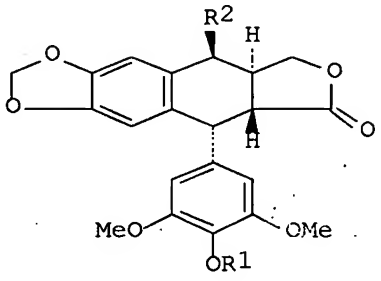
CN L-Proline, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 9 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:457449 CAPLUS Full-text
DOCUMENT NUMBER: 127:149030
TITLE: Syntheses and structure-activity relationship of podophyllotoxin derivatives as potential anticancer drugs
AUTHOR(S): Wang, Yan-Guang; Tao, Lan; Pan, Jian-Lin; Shi, Jian-Feng; Chen, Yao-Zu
CORPORATE SOURCE: Dep. Chem., Zhejiang University, Hangzhou, 310027, Peop. Rep. China
SOURCE: Gaodeng Xuexiao Huaxue Xuebao (1997), 18(7), 1061-1066
CODEN: KTHPDM; ISSN: 0251-0790
PUBLISHER: Gaodeng Jiaoyu Chubanshe
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
GI



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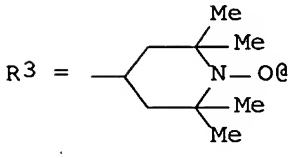
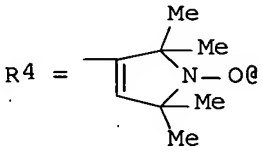




AB Thirteen 4β-substituted podophyllotoxin derivs. I (R1 = H, Me; R2 = R3NH, R3O, R4CONH, 3,5-(NO2)2C6H3CONH, R4CO2, etc.) were prepared from podophyllotoxin or 4'-demethylpodophyllotoxin and evaluated for antitumor activity against mouse leukemia P388 in vivo and human stomach carcinoma SGC-7901 in ivtro. Structure activity relationship was discussed. These results demonstrate the importance of 4'-phenolic hydroxyl group, and suggest further elaboration of 4β-nitrogen-containing substitution to simplify and optimize the structure of this class of anticancer compds.

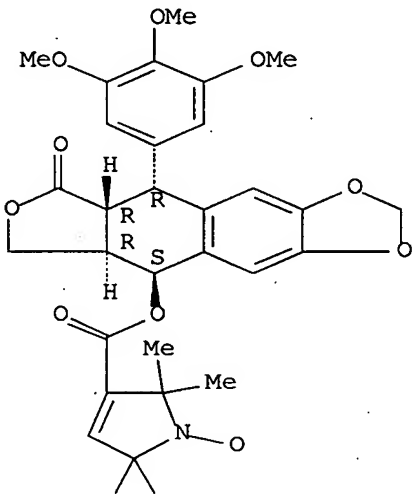
IT 193404-42-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(syntheses and structure-activity relationship of anticancer podophyllotoxin derivs.)

RN 193404-42-1 CAPLUS

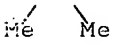
CN 1H-Pyrrol-1-yloxy, 3-[[[(5S,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]oxy]carbonyl]-2,5-dihydro-2,2,5,5-tetramethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

PAGE 1-A



PAGE 2-A



L9 ANSWER 10 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:422746 CAPLUS Full-text
DOCUMENT NUMBER: 127:144745
TITLE: New spin labeled analogs of podophyllotoxin as potential antitumor agents
AUTHOR(S): Wang, Yan-guang; Pan, Jian-lin; Shi, Jian-feng; Chen, Yao-zu
CORPORATE SOURCE: Department Chemistry, Zhejiang University, Hangzhou,

310027, Peop. Rep. China
SOURCE: Life Sciences (1997), 61(5), 537-542
CODEN: LIFSAK; ISSN: 0024-3205
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Four new nitroxyl labeled derivs. of podophyllotoxin, 4-(2,2,6,6- tetramethyl-1-oxyl-4-piperidyl)oxy-epipodophyllotoxin, 4-(2,2,6,6-tetramethyl-1-oxyl-4-piperidyl)oxy-4'- demethylepipodophyllotoxin, 4-(2,2,5,5-tetramethyl-1-oxyl-3-pyrrolinyl)formyloxy-epipodophyllotoxin and 4-(2,2,5,5-tetramethyl-1-oxyl- 3-pyrrolinyl)formyloxy-4'-demethylepipodophyllotoxin, have been synthesized and evaluated for their antitumor activity in vitro. The 4'-demethyl-epipodophyllotoxins showed superior activity to the clin. used etoposide (VP-16) in their inhibition of leukemia P388, lung cancer A549 and stomach carcinoma SGC-7901 cells. The 4'-demethyl-epipodophyllotoxins was more active than the eipodophyllotoxins lacking a free phenolic hydroxyl group at C-4'.

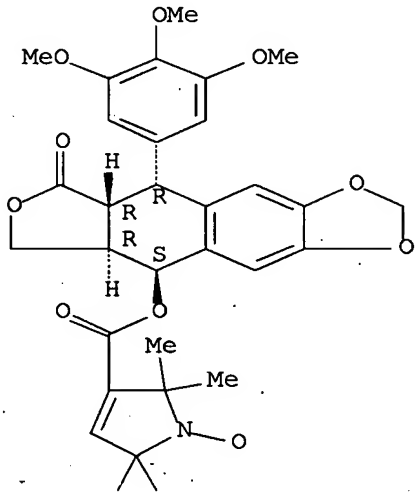
IT 193404-42-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of new spin labeled analogs of podophyllotoxin as potential antitumor agents)

RN 193404-42-1 CAPLUS

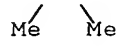
CN 1H-Pyrrol-1-yloxy, 3-[[[(5S,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]oxy]carbonyl]-2,5-dihydro-2,2,5,5-tetramethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

PAGE 1-A



PAGE 2-A



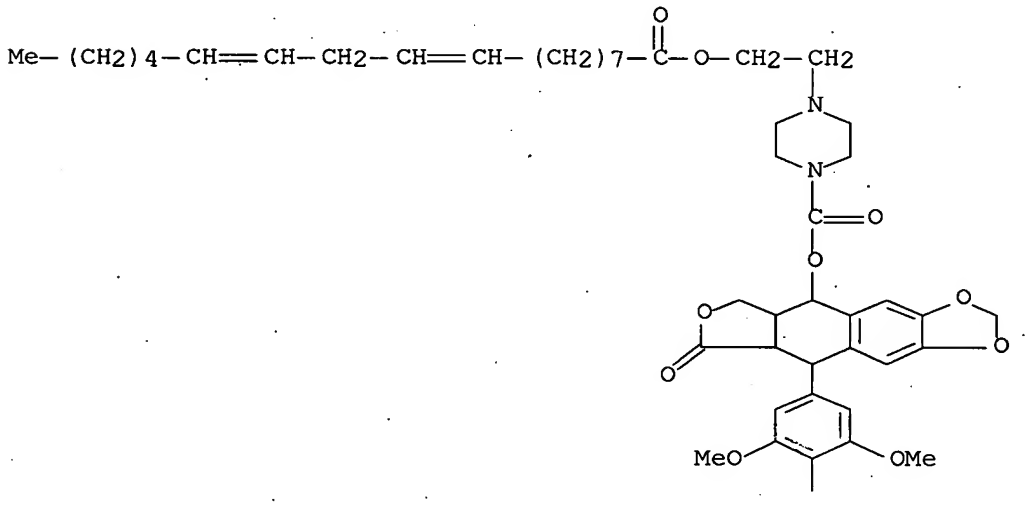
L9 ANSWER 11 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1992:524013 CAPLUS Full-text
DOCUMENT NUMBER: 117:124013
TITLE: Different mechanisms of action of long chain fatty acid esters of podophyllotoxin and esters of epipodophyllotoxin against P388 lymphocytic leukemia in mice
AUTHOR(S): Nagao, Yoshimitsu; Mustafa, Jamal; Sano, Shigeki; Ochiai, Masahito; Tashiro, Tazuko; Tsukagoshi, Shigeru
CORPORATE SOURCE: Fac. Pharm. Sci., Univ. Tokushima, Tokushima, 770, Japan
SOURCE: Medicinal Chemistry Research (1991), 1(4), 295-9
CODEN: MCREEB; ISSN: 1054-2523
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Among podophyllotoxin and epipodophyllotoxin esters of long chain unsatd. or polyhydroxy fatty acids, esters of the former exhibited significant or strong activity against P388 lymphocytic leukemia inoculated into mice. Structure-activity relations are discussed.

IT 143361-59-5
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(neoplasm-inhibiting activity of, structure in relation to)

RN 143361-59-5 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-[2-[(1-oxo-9,12-octadecadienyl)oxy]ethyl]-, 5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester, [5R-[5α(9Z,12Z),5aα,8a.beta.,9α]]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

L9 ANSWER 12 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:7272 CAPLUS Full-text
DOCUMENT NUMBER: 112:7272
TITLE: Preparation and testing of podophyllotoxin derivatives as neoplasm inhibitors
INVENTOR(S): Nagao, Yoshuki; Tsukagoshi, Shigeru; Nakamura, Tadatake
PATENT ASSIGNEE(S): Daiichi Seiyaku Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01117885	A	19890510	JP 1987-275213	19871030
PRIORITY APPLN. INFO.:			JP 1987-275213	19871030
OTHER SOURCE(S):	MARPAT 112:7272			

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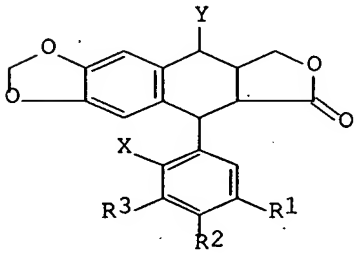

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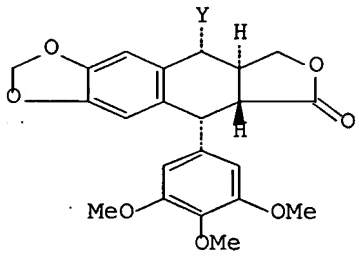


II

AB Title compds. I [R1,R2,R3 = alkoxy; X = halo, H; Y = halo, OH, OCOR4; R4 = (hydroxyalkyl-, cyclic amino-, or benzodioxolyl-substituted) cyclic amino, (cyclic amino-substituted)alkyl amino, (≥1 OH-substituted) (un)saturated hydrocarbyl; except a combination of X = H and Y = OH] are prepared Podophyllotoxin II (Y = OH) was treated with ClCO2Ph in CH2Cl2 in the presence of pyridine to give II (Y = OCO2Ph), which was treated with 2-piperazinoethanol in CH2Cl2 to give II [Y = 4-(2- hydroxyethyl)piperazino]. II [Y = OCO(CH2)7CH:CHCH2CH:CH(CH2)4Me] at 50 mg/kg i.p. showed 157% increase in life span of mice transplanted with leukemia P-388 cells.

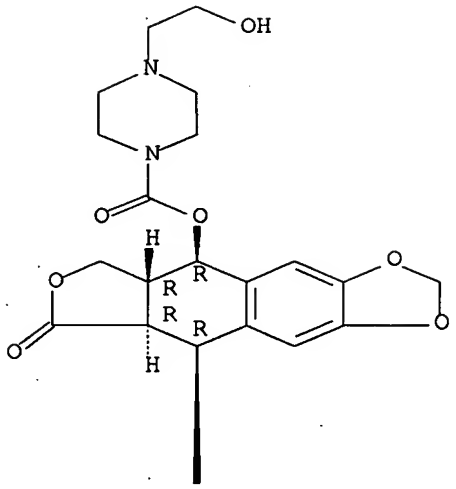
IT 123824-76-0P 123824-79-3P 123824-80-6P
123880-12-6P 123880-13-7P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of, as neoplasm inhibitor)

RN 123824-76-0 CAPLUS

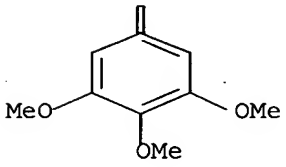
CN 1-Piperazinecarboxylic acid, 4-(2-hydroxyethyl)-, 5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester, [5R-(5α,5aα,8aβ,9α)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



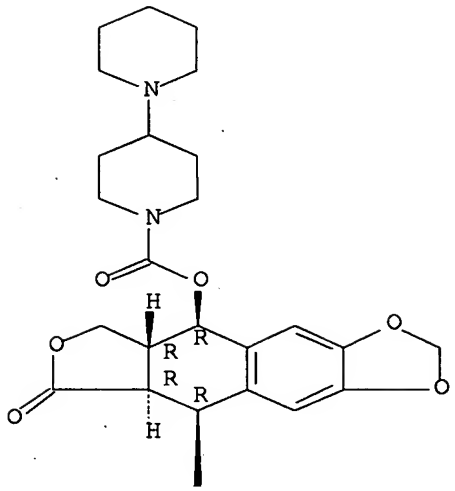
PAGE 2-A



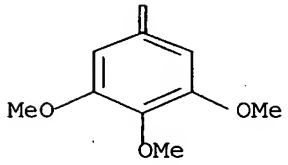
RN 123824-79-3 CAPLUS
CN [1,4'-Bipiperidine]-1'-carboxylic acid, 5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester, [5R-(5α,5aα,8aβ,9α)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



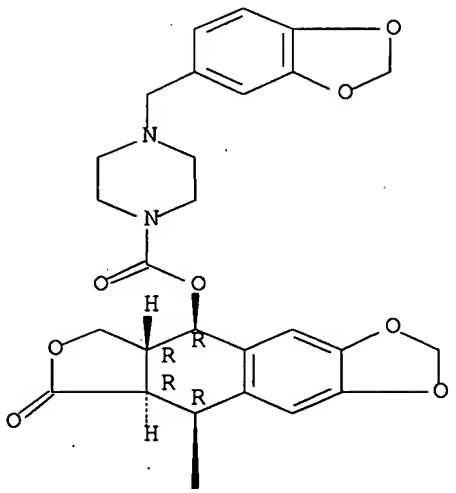
PAGE 2-A



RN 123824-80-6 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-(1,3-benzodioxol-5-ylmethyl)-, 5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester, [5R-(5α,5aα,8aβ,9.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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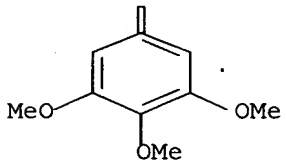
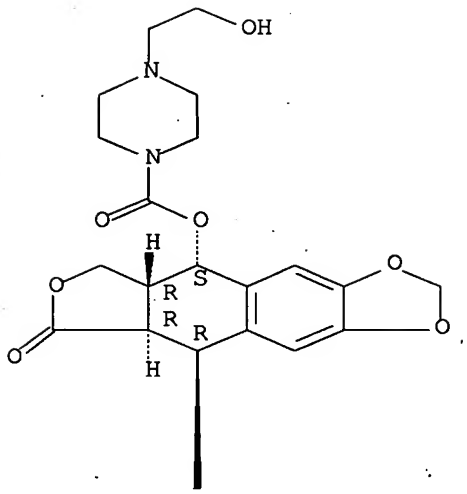


RN 123880-12-6 CAPLUS

CN 1-Piperazinecarboxylic acid, 4-(2-hydroxyethyl)-, 5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester, [5S-(5α,5aβ,8aα,9β)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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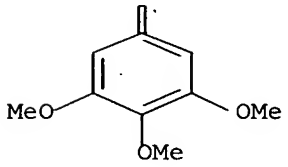
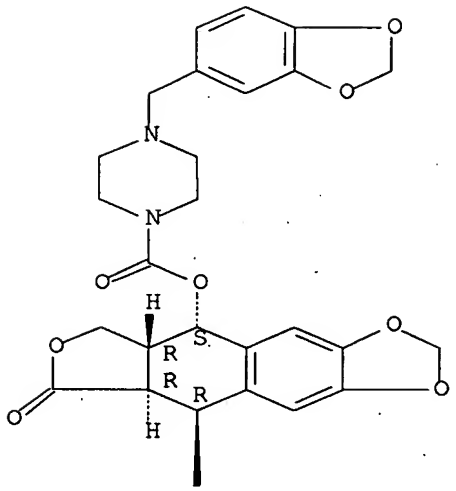


RN 123880-13-7 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-(1,3-benzodioxol-5-ylmethyl)-, 5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester, [5S-(5α,5aβ,8aα,9.beta.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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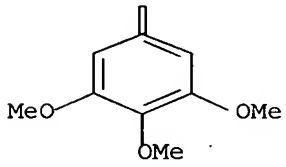
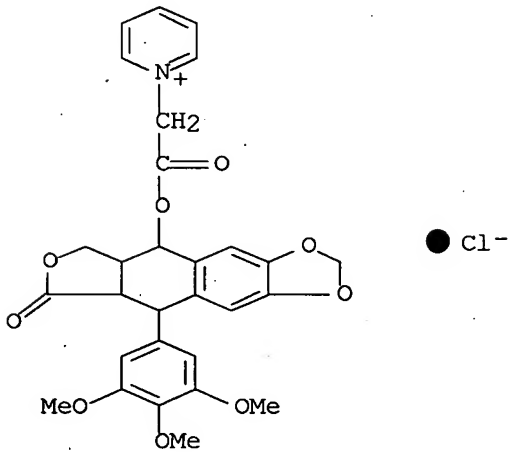


L9 ANSWER 13 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1958:22209 CAPLUS Full-text
DOCUMENT NUMBER: 52:22209
ORIGINAL REFERENCE NO.: 52:4023e-g
TITLE: Effects of a podophyllotoxin derivative on tissue culture systems in which human cancer invades normal tissue
AUTHOR(S): Leighton, Joseph; Kline, Ira; Belkin, Morris; Orr, Henry C.
CORPORATE SOURCE: Natl. Cancer Inst., Bethesda, MD
SOURCE: Cancer Research (1957), 17, 336-44
CODEN: CNREA8; ISSN: 0008-5472
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB Acetylpodophyllotoxin-ω-pyridinium chloride (NCI 3022) (I), in concentration of 1 γ/ml., applied for 6 hrs. to sponge-matrix tissue culture systems in which cells derived from a carcinoma (Strain HeLa) had invaded normal tissue, produced complete metaphase arrest in both normal and tumor cells; removal of I after 6 hrs. was followed by almost complete disappearance of its effect in 18 hrs. When a dose of 1 γ/ml. was given on alternate days for 4 weeks, the effect on tumor cells was much more severe than on normal cells.

IT 122146-76-3, Podophyllotoxin, ester with 1-(carboxymethyl)pyridinium chloride
(effect on cancer cells)
RN 122146-76-3 CAPLUS

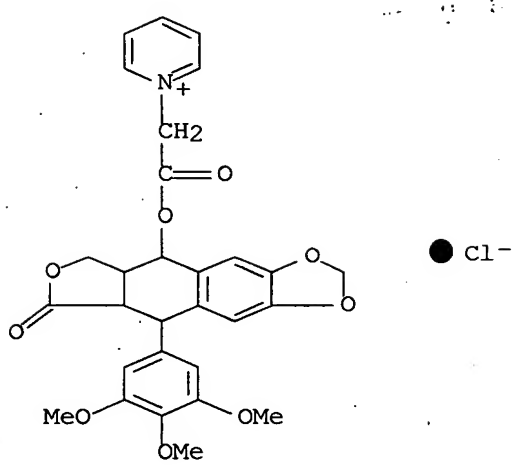
CN 1-(Carboxymethyl)pyridinium chloride, ester with podophyllotoxin (6CI) (CA INDEX NAME)



L9 ANSWER 14 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1957:36019 CAPLUS Full-text
DOCUMENT NUMBER: 51:36019
ORIGINAL REFERENCE NO.: 51:6870b-e
TITLE: Effect of various drugs on the tumor-necrotizing activity of several chemical agents in mice
AUTHOR(S): Pradhan, Sachindra N.; Achinstein, Betty; Shear, Murray J.
CORPORATE SOURCE: Natl. Cancer Inst., Bethesda, MD
SOURCE: Cancer Research (1956), 16, 1062-8
CODEN: CNREA8; ISSN: 0008-5472
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB In mice bearing Sarcoma 37, the tumor-necrotizing potency of the bacterial polysaccharide from Serratia marcescens was reduced by dibenamine, dibenzyline, priscoline, cortisone, and urethan, and not by regitine, dihydroergotamine, pentobarbital sodium, or phenobarbital sodium. The tumor-necrotizing potency of pitressin was inhibited by atropine, dibenzamine, dibenzylamine, and phenobarbital sodium, not by cortisone or pentobarbital sodium. Tumor necrosis induced by serotonin was inhibited by dibenzyline, dibenamine, and priscoline, not by the other drugs. Tumor necrosis by amphetamine was inhibited by dibenzyline and urethan. Tumor necrosis by histamine was inhibited by atropine, dibenzamine, dibenzyline, and pentobarbital sodium, not by cortisone or phenobarbital sodium. Tumor necrosis by acetylpodophyllotoxin-ω-pyridinium chloride was not affected by any of the compds. used. The lethal toxicity of amphetamine was increased by atropine.

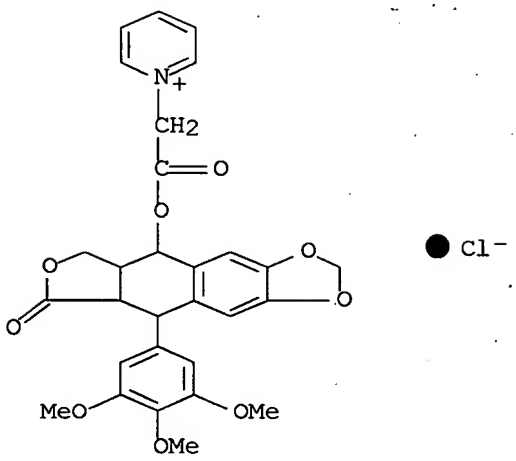
IT 122146-76-3, Podophyllotoxin, ester with 1-(carboxymethyl)pyridinium chloride
(effect on tumor-necrotizing compds.)
RN 122146-76-3 CAPLUS
CN 1-(Carboxymethyl)pyridinium chloride, ester with podophyllotoxin (6CI) (CA INDEX NAME)



L9 ANSWER 15 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1956:89760 CAPLUS Full-text
DOCUMENT NUMBER: 50:89760
ORIGINAL REFERENCE NO.: 50:16920g-i,16921a
TITLE: Enzyme changes induced in normal and malignant tissues with chemical agents. VII. Effect on hydrolytic and synthetic enzymes of diphosphopyridine nucleotide in sarcoma 37
AUTHOR(S): Waravdekar, V. S.; Powers, O. H.; Leiter, J.
CORPORATE SOURCE: Natl. Cancer Inst., Bethesda, MD
SOURCE: Journal of the National Cancer Institute (1940-1978) (1956), 17, 145-54
CODEN: JNCIAM; ISSN: 0027-8874
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB cf. C.A. 50, 11501e. The diphosphopyridine nucleotidase ((DPN)-ase) and DPN-pyrophosphatase activities of various transplanted tumors in mice were determined The DPN-ase and DPN-pyrophosphatase activity of homogenates of sarcoma 37 and of liver from tumor-bearing mice receiving injections of 20 γ/g. of acetylpodophyllotoxin-ω-pyridinium chloride showed rather small changes in enzyme activity in comparison with those in similar tissues from animals not treated with the drug. The ability of tumor homogenates from the treated animals to synthesize DPN was markedly reduced, while the capacity for synthesis of DPN from nicotinamide mononucleotide by the homogenates of livers from these animals increased in proportion to the damage induced in the tumors. Disruption of liver cells from nontumor-bearing mice and of tumor cells by phys. means resulted in a 50% loss in ability of the enzyme in these tissues to synthesize DPN. Liver homogenates from tumor-bearing mice showed approx. 50% less activity for synthesis of DPN than did the homogenates of the livers from nontumor-bearing mice.

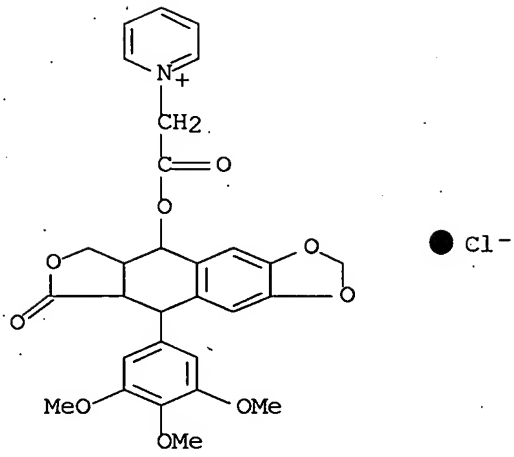
IT 122146-76-3, Podophyllotoxin, ester with 1-(carboxymethyl)pyridinium chloride
(effect on diphosphopyridinenucleotidase and diphosphopyridinepyrophosphatase in neoplasms)
RN 122146-76-3 CAPLUS
CN 1-(Carboxymethyl)pyridinium chloride, ester with podophyllotoxin (6CI) (CA INDEX NAME)



L9 ANSWER 16 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1956:61233 CAPLUS Full-text
DOCUMENT NUMBER: 50:61233
ORIGINAL REFERENCE NO.: 50:11501b-e
TITLE: Enzyme changes induced in normal and malignant tissues with chemical agents. VI. Effect of acetylpodophyllotoxin-ω-pyridinium chloride on malic oxidase and isocitric oxidase systems of sarcoma 37
AUTHOR(S): Waravdekar, V. S.; Powers, O.; Leiter, J.
CORPORATE SOURCE: Natl. Cancer Inst., Bethesda, MD
SOURCE: Journal of the National Cancer Institute (1940-1978) (1956), 16, 1443-52
CODEN: JNCIAM; ISSN: 0027-8874
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB cf. C.A. 49, 14191c. Homogenates of sarcoma 37 from mice that had received a single subcutaneous injection of 20 γ of acetylpodophyllotoxin-ω-pyridinium chloride (I)/g. showed a marked decrease in malic oxidase activity. At 24 hrs. after injection most of the activity was lost, whereas malic dehydrogenase activity was scarcely affected. In the tumor, other enzyme systems closely associated with the malic oxidase system, such as malic-cytochrome c reductase, diphosphopyridine nucleotide (DPN)-cytochrome c reductase, and reduced DPH (DPNH) oxidase, were equally affected by I. Addition of cytochrome c enhanced the DPNH-oxidase activity of both treated and untreated tissues in proportion to their respective activities; addition of DPN increased the malic-cytochrome c reductase activity of the tissues. Oxidation of d-isocitrate by the homogenates of tumors from I-treated animals was markedly lowered but isocitric dehydrogenase was unaffected. Other components of this system, such as triphosphopyridine nucleotide- cytochrome c reductase activity of the treated tumor, also showed marked decrease in activity. The effects of I on the specific oxidase systems (succinic, malic, and isocitric) could be accounted for by the action on the cytochrome system.

IT 122146-76-3, Podophyllotoxin, ester with 1-(carboxymethyl)pyridinium chloride
(effect on enzymes in cancerous tissue)
RN 122146-76-3 CAPLUS
CN 1-(Carboxymethyl)pyridinium chloride, ester with podophyllotoxin (6CI) (CA INDEX NAME)

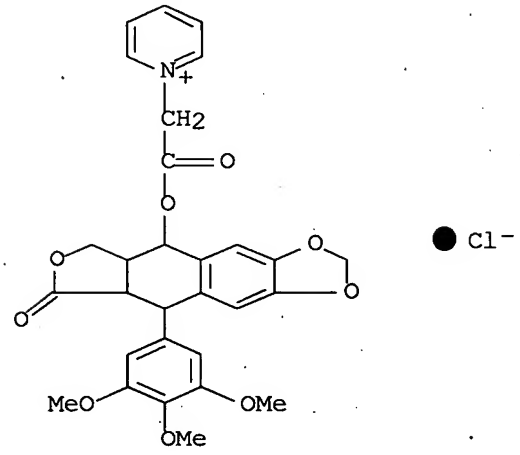


L9 ANSWER 17 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1955:74734 CAPLUS Full-text
DOCUMENT NUMBER: 49:74734
ORIGINAL REFERENCE NO.: 49:14191e-h
TITLE: Enzyme changes induced in normal and malignant tissues with chemical agents. V. Effect of acetylpodophyllotoxin-ω-pyridiniumchloride on uricase, adenosine deaminase, nucleoside phosphorylase, and glutamic dehydrogenase activities
AUTHOR(S): Waravdekar, V. S.; Paradis, Anita D.; Leiter, J.
CORPORATE SOURCE: Natl. Cancer Inst., Bethesda, MD
SOURCE: Journal of the National Cancer Institute (1940-1978) (1955), 16, 99-105
CODEN: JNCIAM; ISSN: 0027-8874
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB Homogenates of sarcoma 37 from mice injected with 20 γ/g. of acetylpodophyllotoxin-ω-pyridinium chloride showed a marked decrease in the mitochondrial enzyme, uricase. Only 25% of the uricase activity of control tissue was observed in the tumor tissue from animals killed 6 h. after the injection. Adenosine deaminase and nucleoside phosphorylase, 2 enzymes in the soluble fraction of the cell, were only slightly affected during the same time interval. Smaller decreases were also observed in the dehydrogenase activity in homogenates of hepatoma 129 from treated animals as compared with homogenates from untreated animals, even after the homogenates were forced through a tissue press at 20,000 lb. sq. in. The percentage of residual activity in tumor homogenates from mice 24 h. after treatment with acetylpodophyllin-ω-pyridinium chloride was: cytochrome oxidase, 66; succinic oxidase, 2; uricase, 2; glutamic dehydrogenase, 46. The glutamic dehydrogenase activity of a variety of tumors in untreated animals was determined Values for glutamic dehydrogenase in tumors other than hepatoma were 1/12 to 1/30 that of liver; hepatoma showed an activity about 3-7 times that of other tumors. The relation between the biochem. changes and the structural integrity of some cell particulates is discussed.

IT 122146-76-3, Podophyllotoxin, ester with 1-(carboxymethyl)pyridinium chloride
(enzyme changes induced by)
RN 122146-76-3 CAPLUS

CN 1-(Carboxymethyl)pyridinium chloride, ester with podophyllotoxin (6CI) (CA INDEX NAME)



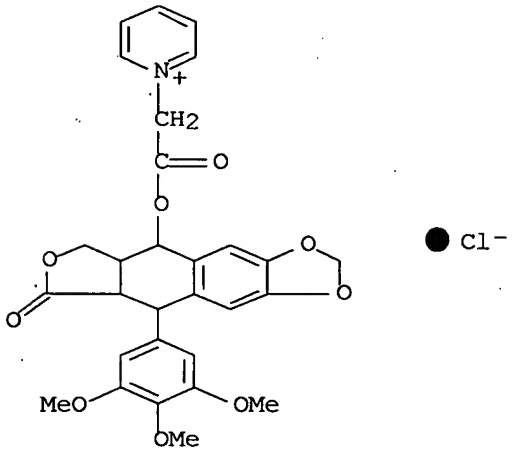
(enzyme changes produced by

L9 ANSWER 18 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1955:74733 CAPLUS Full-text
DOCUMENT NUMBER: 49:74733
ORIGINAL REFERENCE NO.: 49:14191b-e
TITLE: Enzyme changes induced in normal and malignant tissues with chemical agents. IV. Effect of α-peltatin on glucose utilization by sarcoma 37 and on the adenosinetriphosphatase, hexokinase, aldolase, and pyridine nucleotide levels of sarcoma 37
AUTHOR(S): Waravdekar, V. S.; Paradis, Anita D.; Leiter, J.
CORPORATE SOURCE: Natl. Cancer Inst., Bethesda, MD
SOURCE: Journal of the National Cancer Institute (1940-1978) (1955), 16, 31-9
CODEN: JNCIAM; ISSN: 0027-8874
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB cf. C.A. 48, 2922g. Homogenates of sarcoma 37 obtained from mice a few hrs. after a single subcutaneous dose of 20 γ/g. of α-peltatin showed about 40% decreased ability to utilize glucose anaerobically in comparison with homogenates from untreated mice. With increasing diphosphopyridine nucleotide (DPN) concentration in the medium, α-peltatin-treated tumor homogenates showed an increased ability to utilize glucose, reaching a maximum at a DPN concentration of 0.006M. Similar increases in DPN levels did not increase the ability of control tumor to utilize more glucose over that observed with 0.00016M DPN in the medium. At a DPN concentration of 0.006M the glucose uptake by control and treated tumor was the same. The same dose of α-peltatin produced a marked drop in DPN level of sarcoma 37 soon after administration. Only small changes in adenosinetriphosphatase, aldolase, and hexokinase activities were observed during the period (4-6 hrs.) in which the glucose utilization and DPN level exhibited marked decreases.

IT 122146-76-3, Pyridinium, 1-(carboxymethyl)-, chloride, ester with podophyllotoxin
(enzyme changes produced by)
RN 122146-76-3 CAPLUS

CN 1-(Carboxymethyl)pyridinium chloride, ester with podophyllotoxin (6CI) (CA INDEX NAME)



L9 ANSWER 19 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1954:15943 CAPLUS Full-text

DOCUMENT NUMBER: 48:15943

ORIGINAL REFERENCE NO.: 48:2922g-i

TITLE: Enzyme changes induced in normal and malignant tissues with chemical agents. III. Effect of acetylpodophyllotoxin-ω-pyridinium chloride on cytochrome oxidase, cytochrome c, succinoxidase, succinic dehydrogenase, and respiration of sarcoma 37

AUTHOR(S): Waravdekar, V. S.; Paradis, Anita D.; Leiter, J.

CORPORATE SOURCE: Natl. Cancer Inst., Bethesda, MD

SOURCE: Journal of the National Cancer Institute (1940-1978) (1953), 14, 585-92
CODEN: JNCIAM; ISSN: 0027-8874

DOCUMENT TYPE: Journal

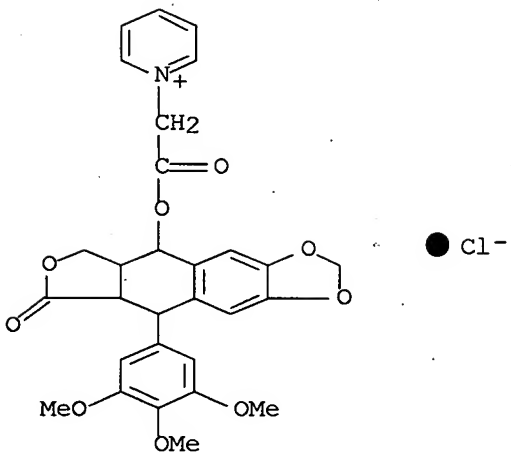
LANGUAGE: Unavailable

AB cf. C.A. 47, 1852c, 11555f. A single subcutaneous injection of 20 γ/g. of acetylpodophyllotoxin-ω-pyridinium chloride (I) in mice bearing sarcoma 37 produced a marked drop in cytochrome oxidase activity, cytochrome c, and succinoxidase (II) activity of liver homogenates, and a marked decrease in respiration of tumor slices. Even a lethal dose of I only slightly reduced the succinic dehydrogenase activity. In liver, kidney, spleen, and lung of tumor-bearing mice treated with a maximum tolerated dose (80 γ/g.) of I, a much smaller percentage decrease in II activity was observed than in tumor tissue. In vitro incubation of tumor slices with I, podophyllotoxin, or colchicine in concns. up to 250 γ/cc. produced smaller changes in II activity and respiration than those observed after the same interval following treatment in vivo.

IT 122146-76-3, Podophyllotoxin, ester with 1-(carboxymethyl)pyridinium chloride
(enzyme changes produced by)

RN 122146-76-3 CAPLUS

CN 1-(Carboxymethyl)pyridinium chloride, ester with podophyllotoxin (6CI) (CA INDEX NAME)

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L2              6 S L1 SSS SAM

     FILE 'CAPLUS' ENTERED AT 09:47:09 ON 12 JUL 2007
                  E US2003-612240/APPS
L3              1 S E3
                  SEL RN L3

     FILE 'REGISTRY' ENTERED AT 09:48:20 ON 12 JUL 2007
L4             52 S E1-E52
L5             87 S L1 SSS FULL
L6                STRUCTURE UPLOADED
L7             80 S L6 FULL SUB=L5
L8              8 S L4 AND L5

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L9             19 S L7

     FILE 'STNGUIDE' ENTERED AT 10:04:38 ON 12 JUL 2007

     FILE 'CAPLUS' ENTERED AT 10:10:31 ON 12 JUL 2007

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FULL ESTIMATED COST	0.90	331.18

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